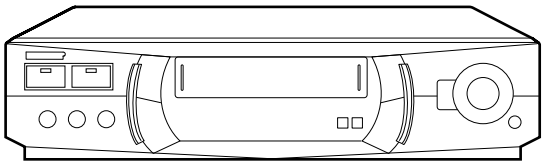
SHARP SERVICE MANUAL

SX8Z5VCH9888U

VHS VIDEO CASSETTE RECORDER



MODEL VC-H9888U

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

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SHARP CORPORATION

This document has been published to be used for after sales service only.
The contents are subject to change without notice.

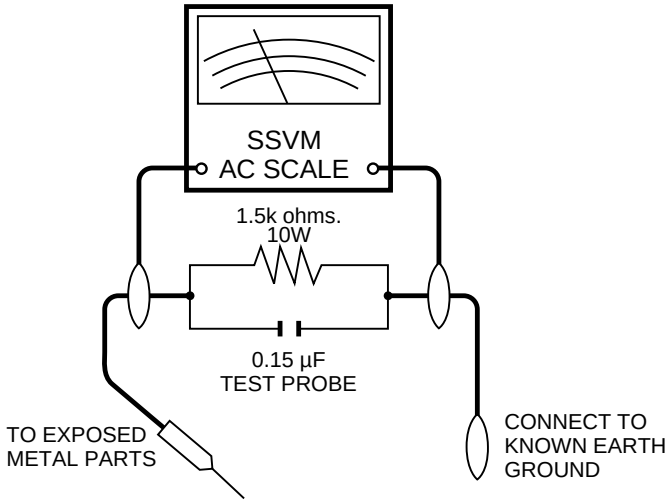
IMPORTANT SERVICE NOTES

BEFORE RETURNING THE VIDEO CASSETTE RECORDER

Before returning the video cassette recorder to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the video cassette recorder.
2. Inspect all protective devices such as non-metallic control knobs, insulation materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor/capacitor networks, mechanical insulators etc.
3. To be sure that no shock hazard exists, check for current in the following manner.

- Plug the AC line cord directly into a 120 volt AC outlet (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as a water pipe or conduit.
- Use an SSVM or VOM with 1000 ohm per volt, or higher, sensitivity or measure the AC voltage drop across the resisor (See Diagram).
- Move the resistor connection to earth exposed metal part having a return path to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, etc.) and measure the AC voltage drop across the resistor. Reverse the AC plug on the set and repeat AC voltage measurements for each exposed part. Any reading of 0.45V rms (this corresponds to 0.3mA rms AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the video cassette recorder to the owner.



WARNING : TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK. DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

This symbol warns the user of uninsulated voltage within the unit that can cause dangerous electric shocks.

This symbol alerts the user that there are important operating and maintenance instructions in the literature accompanying this unit.

CAUTION:
1.6A 125V
This symbol mark means fast operating fuse.
For continued protection against risk of fire, replace only with same type fuse F901 (1.6A, 125V).

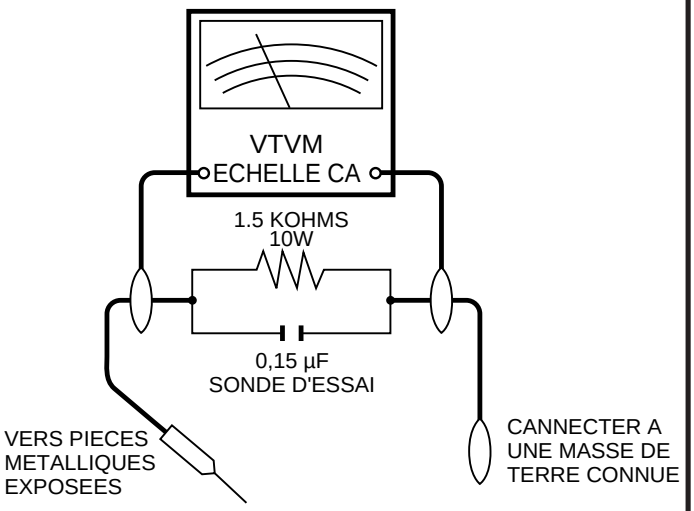
NOTES DE SERVICE IMPORTANTES

AVANT DE RENDRE LE MAGNETOSCOPE

Avant de rendre le magnétoscope à l'utilisateur, effectuer les vérifications de sécurité suivantes.

1. Vérifier toutes les gaines de fil pour être sûr que les fils ne sont pas pincés ou que le matériel n'est pas coincé entre le châssis et les autres pièces métalliques dans le magnétoscope.
2. Vérifier tous les dispositifs de protection tels que les boutons de commande non métalliques, les matériaux d'isolement, le dos du coffret, les couvercles de compartiment et ajustement ou les boucliers, les réseaux de résistance / condensateur d'isolement, les isolateurs mécaniques, etc.
3. Pour être sûr qu'il n'y a aucun risque de choc électrique, vérifier le courant de fuite de la maniére suivante.

- Brancher le cordon d'alimentation secteur directement dans une prise de courant de 120 volts. (Ne pas utiliser de transformateur d'isolement pour cet essai).
- Utiliser deux fils à pinces et connecter une résistance de 10 watts 1,5 kohm en parallèle avec un condensateur de 0,15 µF en série avec des pièces du coffret métallique exposées et une masse de terre connue telle qu'un tuyau ou un conduit d'eau.
- Utiliser un VTVM ou VOM avec une sensibilité de 1000 ohms par volt ou plus ou mesurer la chute de tension CA entre la résistance (voir diagramme).
- Déposer la connexion de la résistance à toutes les pièces métalliques exposées ayant un parcours de retour au châssis (connexions d'antenne, coffret métallique, têtes de vis, boutons et arbres de commande, etc.) et mesurer la chute de tension CA entre la résistance. Inverser la fiche CA (une fiche intermédiaire non polarisée doit être utilisée à seule fin de faire ces vérifications.) sur l'appareil et répéter les mesures de tension CA pour chaque piéce métallique exposée. Toute lecture de 0,45 Vrms (ceci correspond à 0,3 mArms CA) ou plus est excessive et signale un danger de choc qui doit être corrigé avant de rendre le magnétoscope à son utilisateur.



ATTENTION: POUR REDUIRE LES RESQUES D'INCENDIE OU DE CHOC ELECTRIQUE, NE PAS EXPOSER CET APPAREIL A LA PLUIE OU A L'HUMIDITE.

ATTENTION

RISQUE DE CHOC ELECTRIQUE
NE PAS OUVRIR

ATTENTION: AFIN DE REDUIRE LES RISQUES DE CHOC ELECTRIQUE, NE PAS RETIRER LE COUVERCLE, AUCUN ORGANE INTERNE NE PEUT ETRE REPARE PAR L'UTILISATEUR. CONFIER L'APPAREIL A UN DEPANNEUR QUALIFIE.

Ce symbole signale à l'utilisateur la présence d'une tension non isolée à l'intérieur de l'appareil qui peut être la cause de secousses électriques dangereuses.

Ce symbole avertit l'utilisateur que des instructions importantes relatives à l'utilisation et àl'entretien se trouvent dans le manuel accompagnant l'appareil.

PRECAUTION:

1,6A 125V

Cette marque indique le fusible à action in stantansée. Pour la protection continue contre le risque d'incendie, ne remplacer que par le fusible type F901 (1,6A, 125V).

PRECAUTIONS IN PART REPLACEMENT

When servicing the unit with power on, be careful to the section marked white all over.
This is the primary power circuit which is live.
When checking the soldering side in the tape travel mode, make sure first that the tape has been loaded and then turn over the PWB with due care to the primary power circuit.
Make readjustment, if needed after replacement of part, with the mechanism and its PWB in position in the main frame.

(1) Start and end sensors: Q701 and Q702

Insert the sensor's projection deep into the upper hole of the holder. Referring to the PWB, fix the sensors tight enough.

(2) Photocoupler: IC901

Refer to the symbol on the PWB and the anode marking of the part.

(3) Cam switches A and B: D708 and D709.

Adjust the notch of the part to the white marker of the symbol on the PWB. Do not allow any looseness.

(4) Take-up and supply sensors: D707 and D706.

Be careful not to confuse the setting direction of the parts in reference to the symbols on the PWB. Do not allow any losseness.

1. GENERAL INFORMATION

1-1 FEATURES

- Hi-Fi Stereo Sound
- Built-in MTS (Multi-channel TV Sound) Decoder
- The VCR Plus+ Programming System / Cable Box Channel Control Function / Digital Satellite Receiver Control Fundtion
- 360 Times Rewind Speed to Fast Forward and Rewind
- EZ Set up
- Double-Azimuth 4 Head
- 19μ Clear Picture System (in EP mode)
- Auto VIEWCAM Dubbing Function
- HQ System for Better Resolution and color Reproduction
- Multi-Language (English / Spanish / French) OSD (On Screen Display) with Menu Screen Guidance
- 181-channel PLL Quartz Synthesized Random Access Tuner with Automatic Channel Setting
- Quick Start with Full Loading Mechanism
- 1-Year, 8-Event Programmable Timer
- Simple Recording Timer
- Ruminus Universal Remote Control
- Gamma Function
- Sharp Super Picture
- Field-Still / Variable Slow / Frame Advance
- Real-Time Counter
- Automatic Daylight Saving-Time (D.S.T) Adjustment
- Blue Screen Noise Elimination
- Energy Saving Function
- Auto Tracking Control System
- Digital Program Search System (DPSS)
- Skip Search
- Instant Replay
- Auto Zero Back
- Recroded Section Auto Repeat
- Full Automatic Playback
- Tamper Proof
- Up to 8 Hours of Recording and Playback (with T-160 Cassette)
- Built-in Shuttle Control System
- Built-in Front AV Jacks
- Automatic Head Cleaning System
- 20 seconds Timer Back-up

1-2 SPECIFICATIONS

1) Recording system

Format:	VHS NTSC standard
Luminance signal:	FM recording
Chroma signal:	Low frequency converted direct recording
Color system:	NTSC
Number of video head:	4
Tape speed:	SP (33.35mm/sec.)
	LP (16.67mm/sec.) (playback only)
	EP (11.12mm/sec.)

2) Video signal

Input level:	0.5 ~ 2.0Vp-p, 75 ohm Unbalanced
Output level:	1.0Vp-p, 75 ohm Unbalanced
Horizontal resolution:	220 lines (SP mode)
Signal to noise ratio:	45dB (SP mode)

3) Audio signal

Input level:	–8dBs (309mVrms, 47k ohm)
Output level:	–8dBs (309mVrms, 1k ohm)
Frequency response:	80Hz ~ 10kHz (SP mode linear), 20Hz ~ 20kHz (Hi-Fi mode)
Signal to noise ratio:	43dB (SP mode linear)
Hi-Fi Dynamic range:	90dB (Hi-Fi models)
Wow and flutter:	0.005% max. (Hi-Fi mode) with T-120 tape

4) Receiving channel

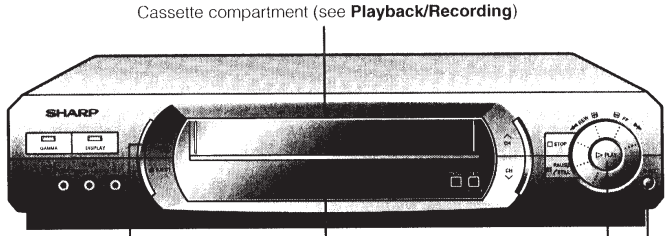
VHF:	Channels 2 ~ 13
UHF:	Channels 14 ~ 69
CATV:	Channels A-8, A-5 ~ W+84
Antenna input Impedance:	VHF/UHF; 75 ohm

5) Misc.

Fast forward/Rewind time:	Approximate 1.0 minutes with T-120 cassette
Power source:	120V, 60Hz
Power consumption:	20W
:	4W (When POWER is OFF)
:	0.6W (When Energy Saving is ON and POWER is OFF)
Allowable ambient temperature:	5°C to 40°C (41°F to 104°F)
Operating humidity:	below 80% RH
Dimensions:	430 (W), 284 (D), 92 (H) mm (16-15/16, 11-6/32, 3-5/8 inch)
Weight:	3.5kg (7.7 lbs)
Accessories included:	75 ohm coaxial cable, Operation manual, Operation guide, infrared remote control, Battery (2 pcs.)
Note:	Specifications may be changed for improvement without notice.

Major Components of Your VCR

[Front]



POWER button
(When pressed to turn on the VCR, some indicators on the Multi-Function display light up, and the Multi-Function display brightens. When the power is turned off, the Multi-Function display dims. If Energy Saving Mode is ON and POWER is turned OFF, the Multi-Function display will turn OFF.)

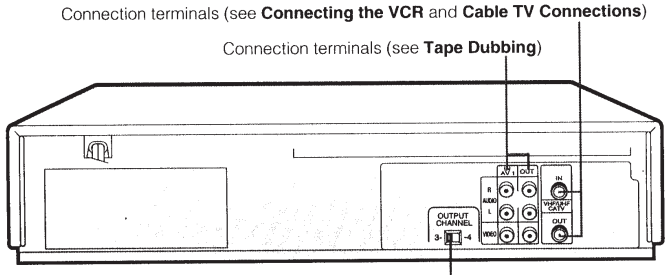
Multi-Function Display (explained throughout the operation instructions)

Display	Symbol	Function Status	Display	Symbol	Function Status
STOP	—	Stop	FF	—	Fast forward
PLAY	▶	Play	REW	—	Rewind
PLAY	▶	Video Search, Slow, Still, Frame Advance	PAUSE	REC	Rec Pause
REC	REC	Record	—	📼	Cassette-in

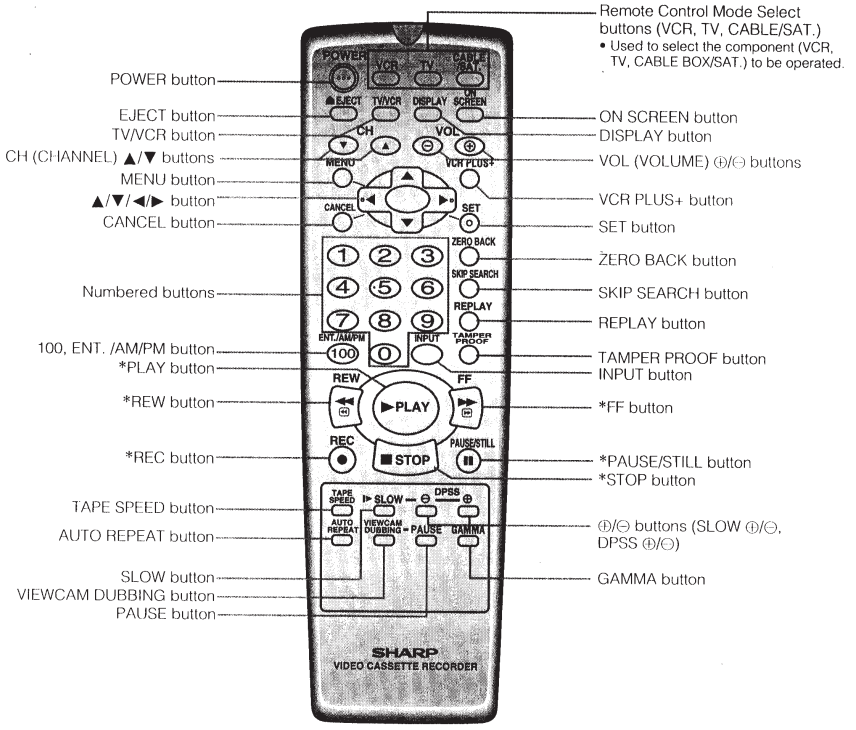
NOTE

- The display will return to the original mode (counter or clock display) 3 seconds after the VCR enters the operation mode.

[Rear]


Connection terminals (see **Connecting the VCR** and **Cable TV Connections**)
Connection terminals (see **Tape Dubbing**)
OUTPUT CHANNEL
3 ↔ 4 OUTPUT CHANNEL selector (see **Setting the 3 ↔ 4 Output Channel Selector**)

Remote Control



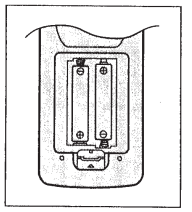
NOTE

- If VCR is OFF, remote control sometimes takes time to operate. In this case do the operation again.

These buttons with *mark (the luminous buttons) as shown above glow.
To use the glow in the dark display on the remote control, place it under a fluorescent light or other lighting.
The phosphorescent material contains no radioactive or toxic material, so it safe to use.

- The degree of illumination will vary depending on the strength of lighting used.
- The degree of illumination will decrease with time and depending on the temperature.
- The time needed to change the phosphorescent display will vary depending on the surrounding lighting.
- Sunlight and fluorescent lighting are the most effective when charging the display.

Inserting the Batteries



Make sure that the batteries have been properly installed first. Fit two batteries type "AA". If the remote control stops working, fit new batteries.

Ensure the batteries are fitted correctly, matching the polarities (⊕/⊖) indicated in the remote control.

NOTE

- **After changing the batteries in the remote control, the code settings for the TV, cable box and Digital Satellite Receiver must be re-entered.**
- Do not subject the remote control to shock, water or excessive humidity.
- The remote control may not function if the VCR sensor is in direct sunlight or any other strong light.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old and new batteries, or mix brands in use.
- Remove the batteries if the remote control will not be operated for an extended period of time.
- If the remote control does not function properly when new batteries are installed, remove the batteries and wait 5 minutes before re-installing them.

2. DISASSEMBLY AND REASSEMBLY

2-1. DISASSEMBLY OF MAJOR BLOCKS

TOP CABINET : Remove 4 screws ①.

FRONT PANEL : Remove 2 screws ② and 7 clips ③. Be careful not to undo the lower hooks alone andattempt to tilt the front panel out of position. The jack PWB holder's right-hand hook may get broken. Undothe front panel's upper and lower hooks together and take out the front panel untilted.

OPERATION PWB : Remove 1 clip ⓐ.

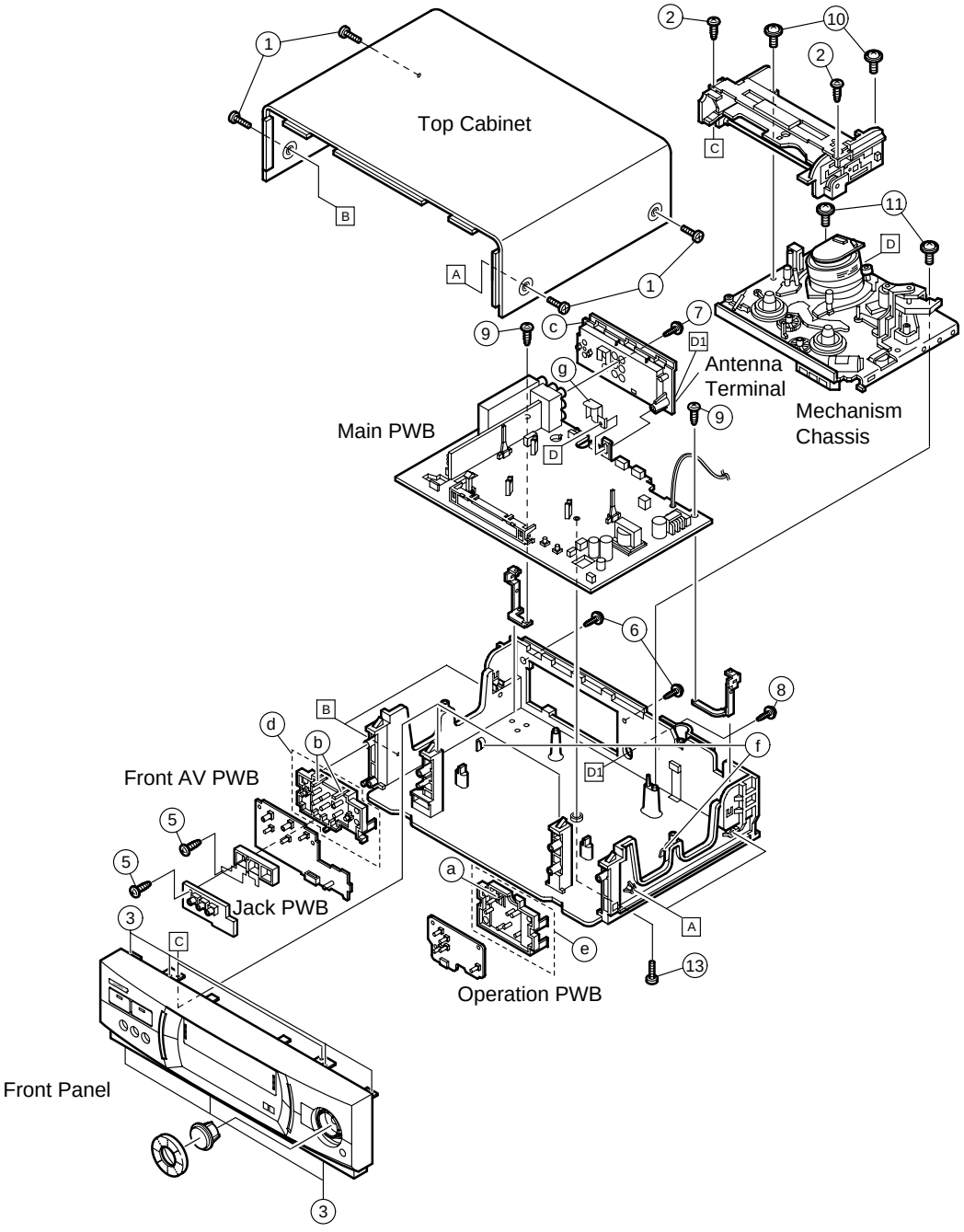
FRONT AV PWB/ JACK PWB/ JACK PWB HOLDER : Remove 2 screws ⑤ and 2 clip ⓑ.

MECHANISM / MAIN PWB UNIT/ ANTENNA TERMINAL COVER : Undo the 3 hooks each of the front left-hand and right-hand PWB holders ⓓ and ⓔ. Remove the 2 screws ⑪ and ⑨ each first and then the 2 screws ⑥. Undo the hooks ⓕ and ⓒ. (Take the mechanism, the PWBs, and the antenna terminal board in this order out of the chassis.)

ANTENNA TERMINAL COVER : Remove 1 screw ⑧ and shield case ⓖ (Top). Remove 1 screw ⑦.

MAIN PWB : Remove 1 screw ⑬.

CASSETTE : Removing the cassette control from mechanism, remove 2 screws ⑩.



2-2. CARES WHEN REASSEMBLING

INSTALLING THE CASSETTE CONTROLLER

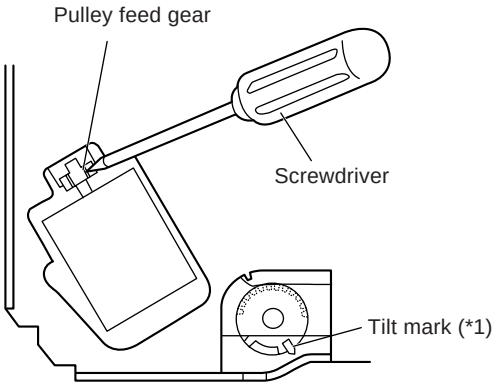
When the cassette controller is installed on the mechanism, the initial setting is essential condition.
There are two initial setting methods, namely electrical and mechanical.

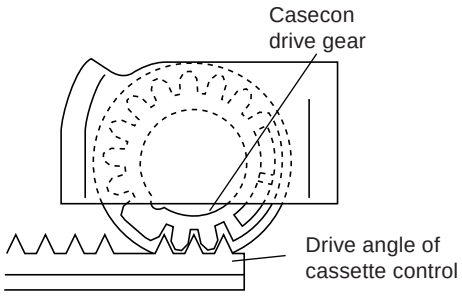
1. Electrical initial setting

So as to perform initial setting of mechanism execute the Step 1 of Installation of cassette housing. After ascertaining the return to the initial setting position (*1) install the cassette controller. (Conditions: When mechanism and PWB have been installed)

2. Mechanical initial setting

Feed the pulley feed gear of loading motor with screw driver. After ascertaining the return to the initial set position (*1) install the cassette controller in the specified position. (This method is applied only for the mechanism.)



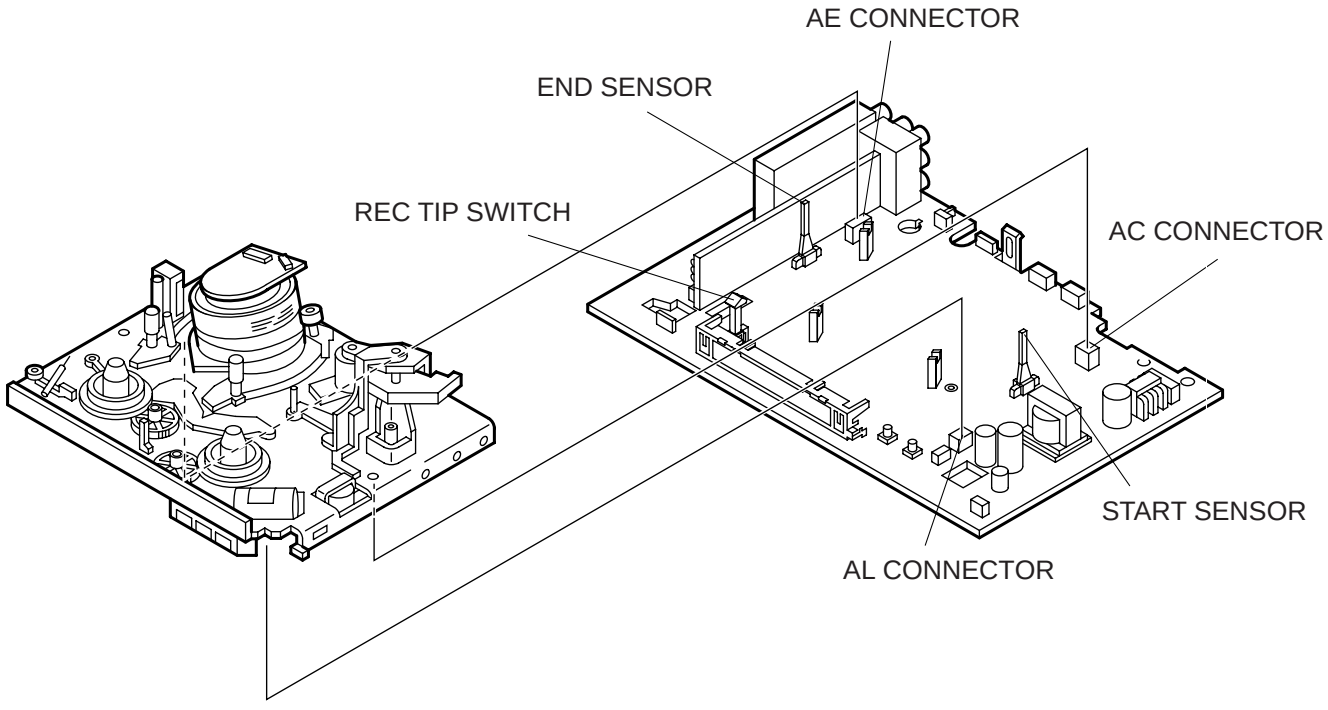


INSTALLING THE MECHANISM ON PWB

Lower vertically the mechanism, paying attention to the mechanism edge, and install the mechanism with due care so that the parts are not damaged. So as to fix the mechanism to the main PWB install two housings. (Fit the antenna cover to one of them. For other, fix the vicinity of loading motor and solder joint side of main PWB.) Connect again the FFC cable (AA-MH, AD-ME, AH-MZ) between the mechanism and the main PWB.

PARTS WHICH NEED PARTICULAR CARE

When installing the mechanism chassis on the PWB unit, take care so as to prevent deformation due to contact of mechanism chassis with REC TIP SW.



3. ELECTRICAL ADJUSTMENT

Notes:

- Before the adjustment:
  Electrical adjustments discussed here are often required after replacement of electronic components and mechanical parts such as video heads.
  Check that the mechanism and all electric components are in good working condition prior to the adjustments, otherwise adjustments can not be completed.
- The servo circuit adjustment data is written on the memory IC (IC710) that is used in this product. When this IC has been replaced, it is necessary to readjust the servo circuit data.
- Before readjusting this data, warm up and age the set for more than 5 minutes.

• Instruments required:

- Color TV monitor
- Alignment tape (VROATSV, VROABZGS)
- TV signal generator
- Blank video cassette tape
- Dual-trace oscilloscope
- Valve voltmeter (2-channel type)
- Sound multiplex signal generator
- Screwdriver for adjustment

• Test point layout

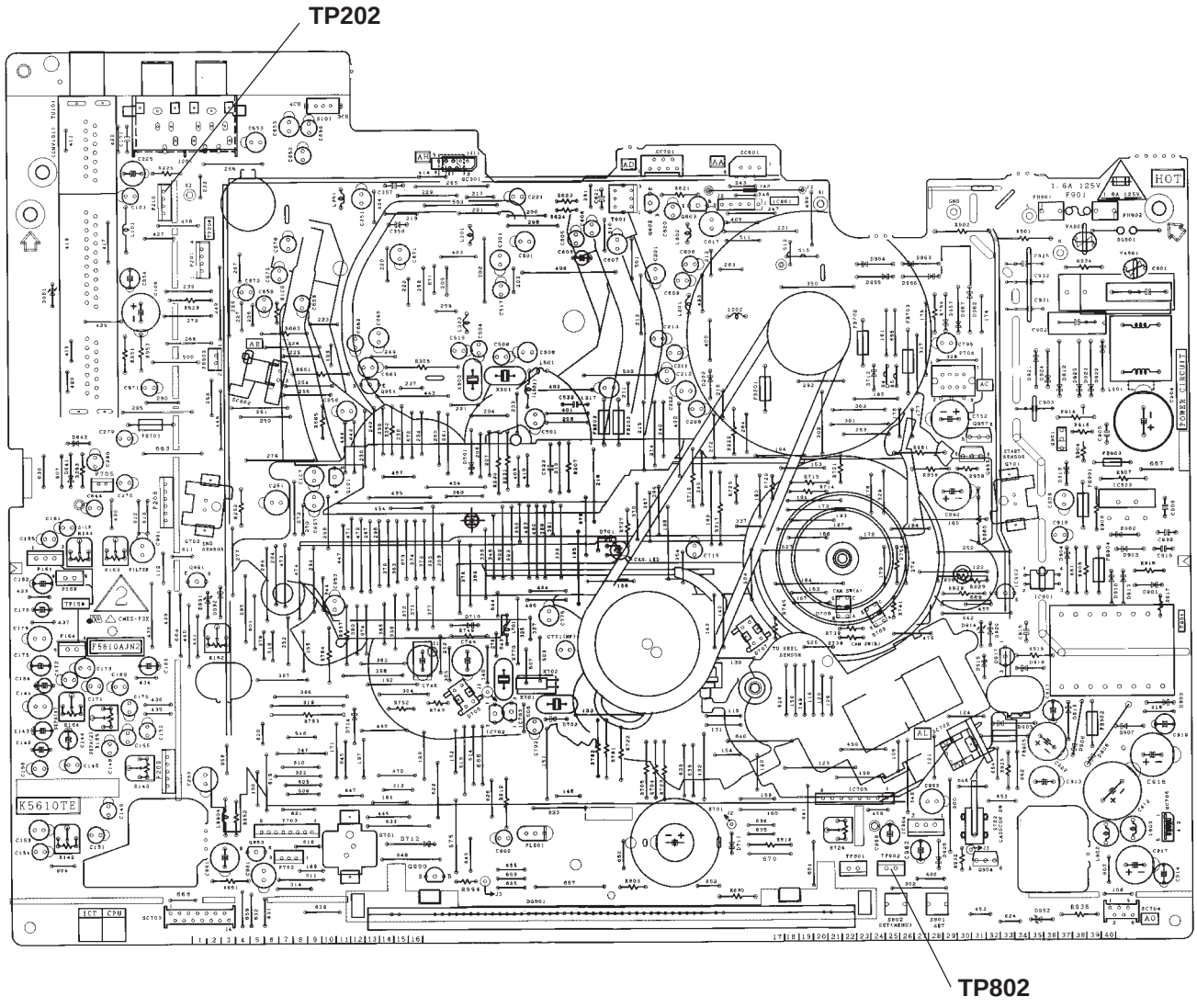


Figure 3-1

SERVO CIRCUIT ADJUSTMENT

3-1 ADJUSTMENT OF HEAD SWITCHING POINT

Measuring instrument	Dual-trace oscilloscope
Mode	Playback
Cassette	Alignment tape (VROABZGS)
Test point	TP202 (H.SW.P) VIDEO OUT jack
Adjusting point	Call up the test mode (get TP802 short-circuited). Usethe tracking/ channel select (▲) and (▼) buttons of the set.
Specification	5.5± 0.5H (lines)

1. Play the alignment tape (VROABZGS).
2. Connect the oscilloscope to TP202 (CH-1) and VIDEO OUTjack (CH-2).
3. Get TP802 on the main PWB short-circuited to call the test mode.
4. Press the PLAY button, and the play icon starts flashing in the display and the automatic adjustment function gets started.
5. Wait until the play icon in the display stays on to indicate that the adjustment is complete.
6. Watch the oscilloscope screen and make sure the setting is 5.5 ± 0.5 H.
7. If the setting is out of this range, readjust the data using the channel select (▲) and (▼) buttons of the set or the remote controller.
8. Finally press the STOP button to quit the test mode.

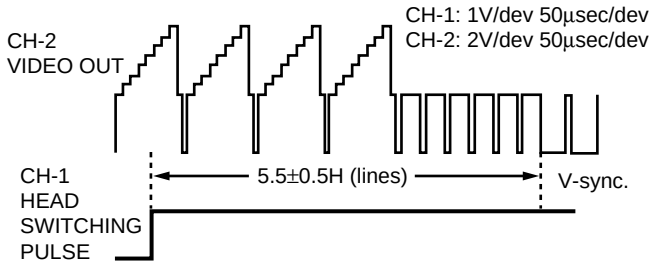


Figure 3-2.

3-2 ADJUSTMENT OF SLOW TRACKING PRESET

Measuring instrument	Color TV monitor
Mode	Make recording on self-recording tape in SP mode or EP mode. Play it back.
Input signal	Commercial broadcast or video signal
Test point	Color TV monitor
Adjusting point	Call up the test mode (get TP802 short-circuited). Use the TRACKING/ CHANNEL select (▲) and (▼) buttons of the set.
Specification	Sweep the noise bar down to the bottom of the colormonitor screen.

1. Input commercial broadcast or video signal to video input terminal.
2. Make recording on self-recording tape in SP mode. Play it back.
3. Press the SLOW button and put the unit in slow mode.
4. In the slow mode, get TP802 on the main PWB short-circuited. Make sure all the display marks light up and the test mode is called up.
5. Watching the color monitor screen, press the tracking/ channel select (▲) and (▼) buttons. Sweep the noise bar down to the bottom of the color monitorscreen.
6. Press the PLAY button to bring back the play mode. Then press the PAUSE/STILL button to call up the still play mode. Now make sure there is no noise bar on the screen.
7. For the EP mode put adjustment at the same adjustment way as SP mode.

3-3. ADJUSTMENT OF FV (False Vertical Sync) OF STILL PICTURE

Measuring instrument	Color TV monitor
Mode	Make recording on self-recording tape in SP mode or EP mode. Play it back.
Input signal	Commercial broadcast or video signal
Test point	Color TV monitor
Adjusting point	TRACKING/CHANNEL select (▲) and (▼) buttons of the set.
Specification	No vertical jitter of picture

1. Input commercial broadcast or video signal to video input terminal.
2. Make recording on self-recording tape in SP mode. Play it back.
3. Press the PAUSE/STILL button to freeze the picture.
4. Look at the monitor screen and adjust (▲) or (▼) TRACKING/CHANNEL select buttons so that the vertical jitter of the picture is minimized.
5. For the EP mode put adjustment at the same adjustment way as SP mode.

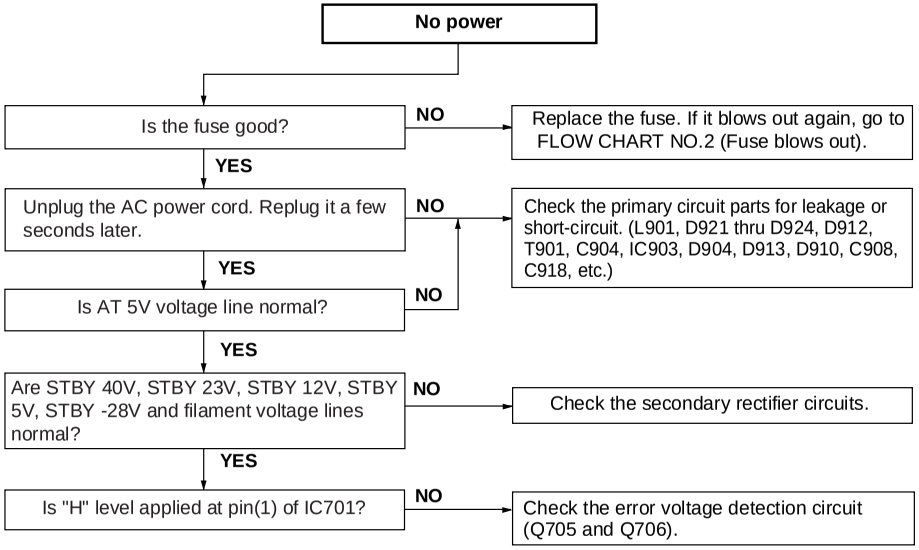
3-4. ADJUSTMENT OF MULTIPLEX SEPARATION

Measuring instrument	TV signal generator, Sound multiplex signal generator and Valve voltmeter (2-channel type)
Mode	E-E mode
Input signal	Sound multiplex signal
Test point	Audio output terminal (L, R)
Adjusting point	R141 (S-IF ADJ.)
Specification	Maximum difference in valve voltmeter pointer readings(over 25 dB).

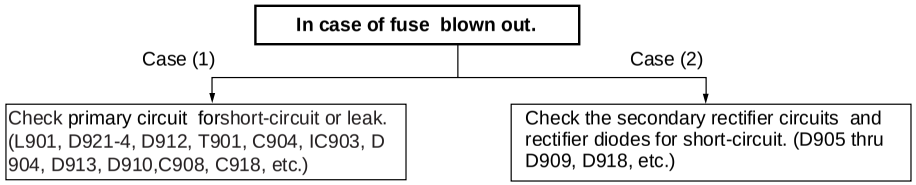
1. Using the TV signal generator or the sound multiplex signal generator, feed the sound multiplex signal to the set's antenna terminal.
2. Set the sound multiplex signal generator to the stereo mode. Give the left and right channels 400 Hz, 100% modulation and 400 Hz, 0% modulation, respectively.
3. Connect the valve voltmeter's CH-1 and CH-2 to the left-channel and right-channel audio output jacks, respectively. Adjust R141 (S-IF ADJ.) so that the valve voltmeter's pointer readings between both the channels be maximum (over 25 dB).

4. TROUBLESHOOTING

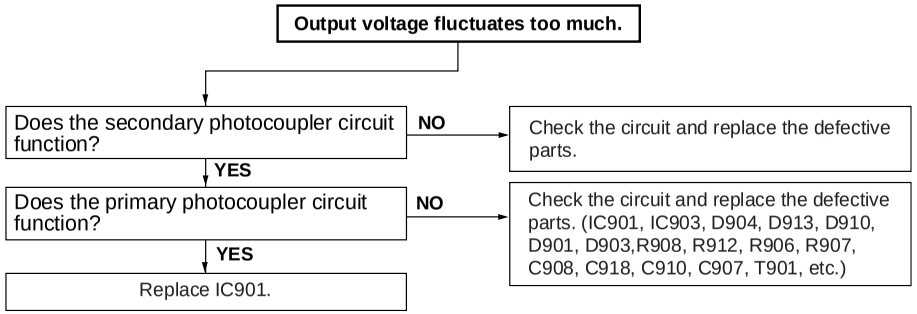
FLOW CHART NO.1 POWER TROUBLESHOOTING(1)


No power
Is the fuse good?
NO
Replace the fuse. If it blows out again, go to FLOW CHART NO.2 (Fuse blows out).
YES
Unplug the AC power cord. Replug it a few seconds later.
NO
Check the primary circuit parts for leakage or short-circuit. (L901, D921 thru D924, D912, T901, C904, IC903, D904, D913, D910, C908, C918, etc.)
YES
Is AT 5V voltage line normal?
NO
YES
Are STBY 40V, STBY 23V, STBY 12V, STBY 5V, STBY -28V and filament voltage lines normal?
NO
Check the secondary rectifier circuits.
YES
Is "H" level applied at pin(1) of IC701?
NO
Check the error voltage detection circuit (Q705 and Q706).

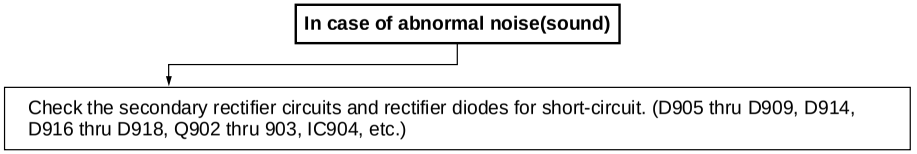
FLOW CHART NO.2 POWER TROUBLESHOOTING(2)


In case of fuse blown out.
Case (1)
Case (2)
Check primary circuit forshort-circuit or leak. (L901, D921-4, D912, T901, C904, IC903, D 904, D913, D910,C908, C918, etc.)
Check the secondary rectifier circuits and rectifier diodes for short-circuit. (D905 thru D909, D918, etc.)

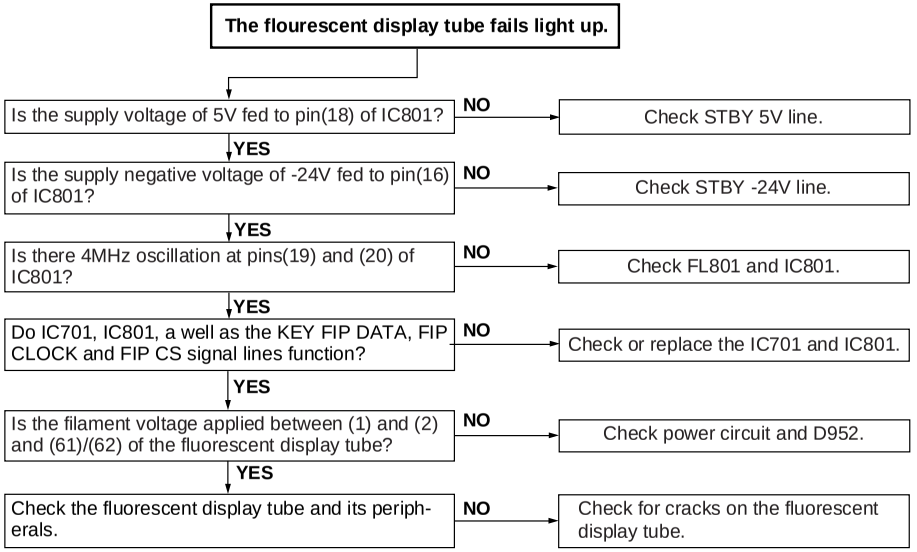
FLOW CHART NO.3 POWER TROUBLESHOOTING(4)


Output voltage fluctuates too much.
Does the secondary photocoupler circuit function?
NO
Check the circuit and replace the defective parts.
YES
Does the primary photocoupler circuit function?
NO
Check the circuit and replace the defective parts. (IC901, IC903, D904, D913, D910, D901, D903,R908, R912, R906, R907, C908, C918, C910, C907, T901, etc.)
YES
Replace IC901.

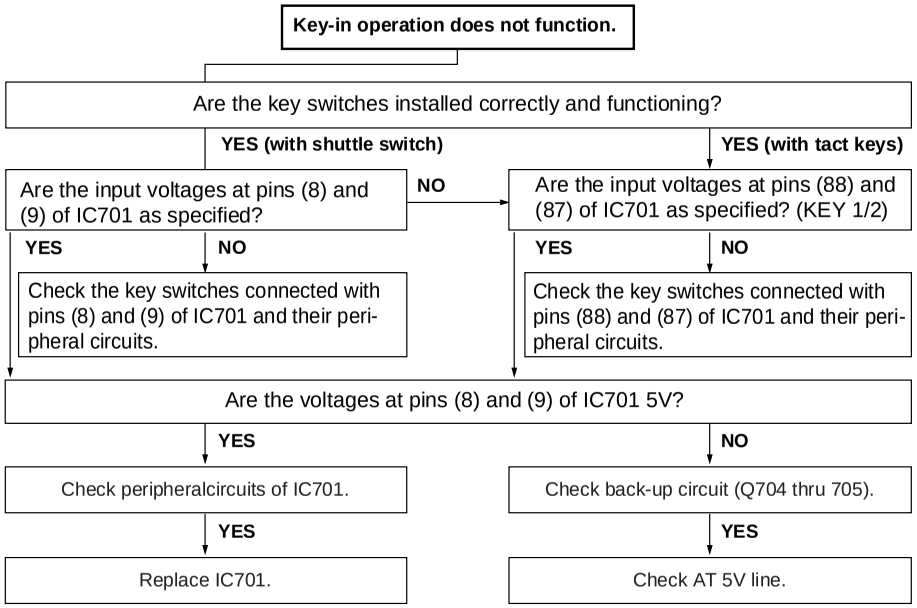
FLOW CHART NO.3 POWER TROUBLESHOOTING(3)


In case of abnormal noise(sound)
Check the secondary rectifier circuits and rectifier diodes for short-circuit. (D905 thru D909, D914, D916 thru D918, Q902 thru 903, IC904, etc.)

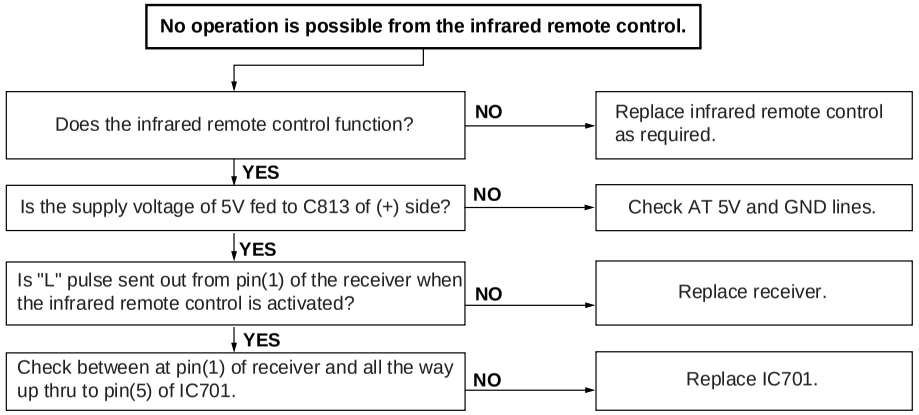
FLOW CHART NO.5 TIMER TROUBLESHOOTING (1)


The flourescent display tube fails light up.
Is the supply voltage of 5V fed to pin(18) of IC801?
NO
Check STBY 5V line.
YES
Is the supply negative voltage of -24V fed to pin(16) of IC801?
NO
Check STBY -24V line.
YES
Is there 4MHz oscillation at pins(19) and (20) of IC801?
NO
Check FL801 and IC801.
YES
Do IC701, IC801, a well as the KEY FIP DATA, FIP CLOCK and FIP CS signal lines function?
NO
Check or replace the IC701 and IC801.
YES
Is the filament voltage applied between (1) and (2) and (61)/(62) of the fluorescent display tube?
NO
Check power circuit and D952.
YES
Check the fluorescent display tube and its periph-erals.
NO
Check for cracks on the fluorescent display tube.

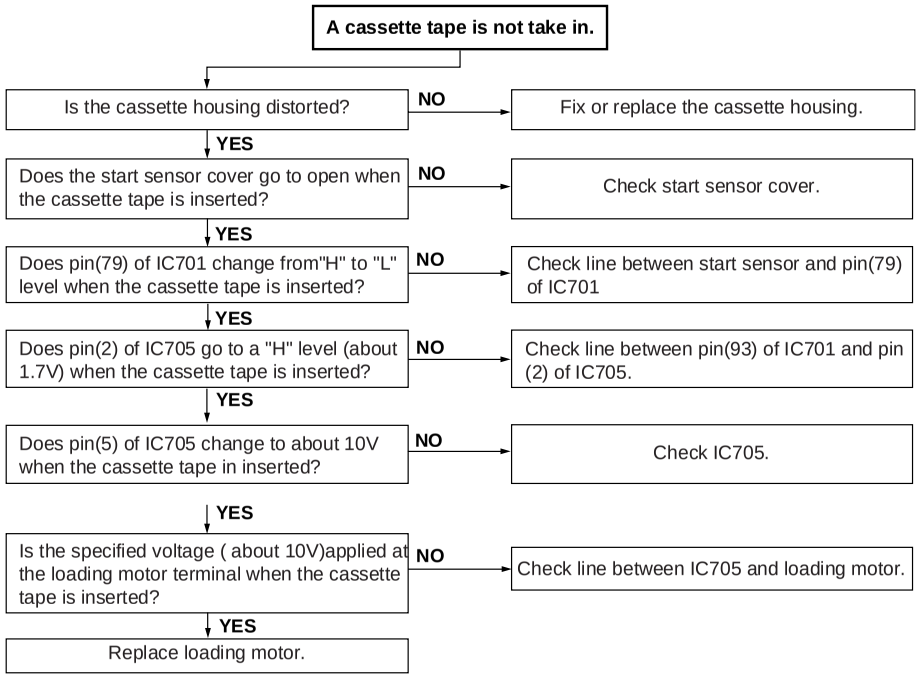
FLOW CHART NO.6 TIMER TROUBLESHOOTING (2)


Key-in operation does not function.
Are the key switches installed correctly and functioning?
YES (with shuttle switch)
YES (with tact keys)
Are the input voltages at pins (8) and (9) of IC701 as specified?
NO
Are the input voltages at pins (88) and (87) of IC701 as specified? (KEY 1/2)
YES
NO
YES
NO
Check the key switches connected with pins (8) and (9) of IC701 and their peri-pheral circuits.
Check the key switches connected with pins (88) and (87) of IC701 and their peri-pheral circuits.
Are the voltages at pins (8) and (9) of IC701 5V?
YES
NO
Check peripheralcircuits of IC701.
Check back-up circuit (Q704 thru 705).
YES
YES
Replace IC701.
Check AT 5V line.

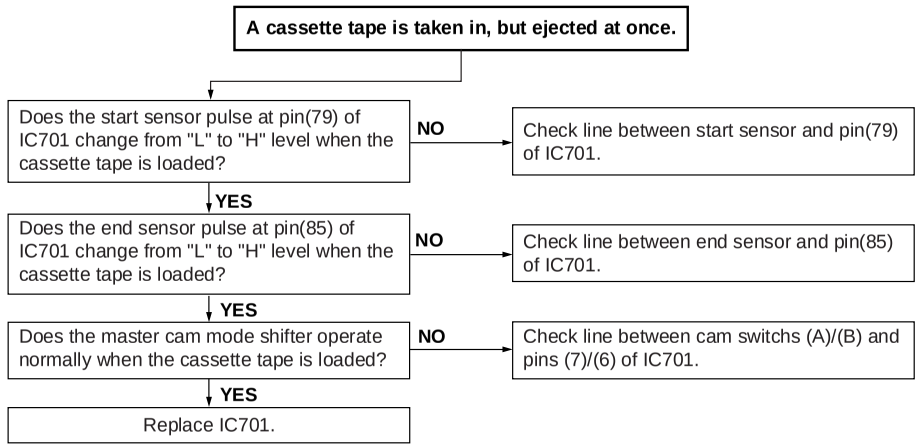
FLOW CHART NO.7 INFRARED R/C TROUBLESHOOTING


No operation is possible from the infrared remote control.
Does the infrared remote control function?
NO
Replace infrared remote control as required.
YES
Is the supply voltage of 5V fed to C813 of (+) side?
NO
Check AT 5V and GND lines.
YES
Is "L" pulse sent out from pin(1) of the receiver when the infrared remote control is activated?
NO
Replace receiver.
YES
Check between at pin(1) of receiver and all the way up thru to pin(5) of IC701.
NO
Replace IC701.

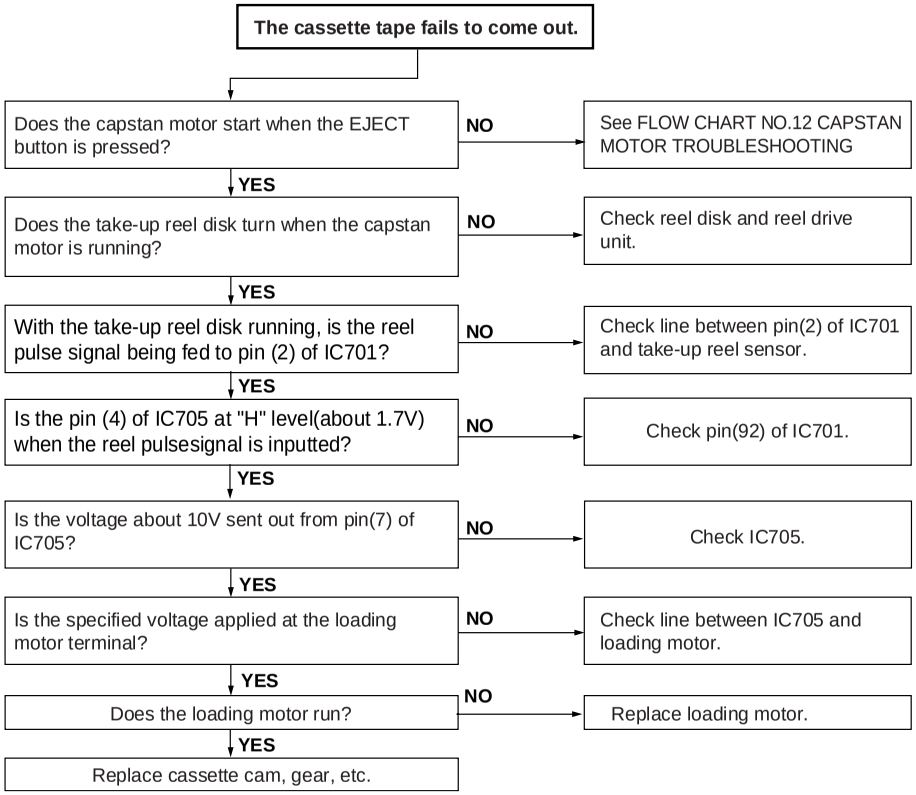
FLOW CHART NO.8 CASSETTE CONTROL TROUBLESHOOTING(1)


A cassette tape is not take in.
Is the cassette housing distorted?
NO
Fix or replace the cassette housing.
YES
Does the start sensor cover go to open when the cassette tape is inserted?
NO
Check start sensor cover.
YES
Does pin(79) of IC701 change from"H" to "L" level when the cassette tape is inserted?
NO
Check line between start sensor and pin(79) of IC701
YES
Does pin(2) of IC705 go to a "H" level (about 1.7V) when the cassette tape is inserted?
NO
Check line between pin(93) of IC701 and pin (2) of IC705.
YES
Does pin(5) of IC705 change to about 10V when the cassette tape in inserted?
NO
Check IC705.
YES
Is the specified voltage (about 10V)applied at the loading motor terminal when the cassette tape is inserted?
NO
Check line between IC705 and loading motor.
YES
Replace loading motor.

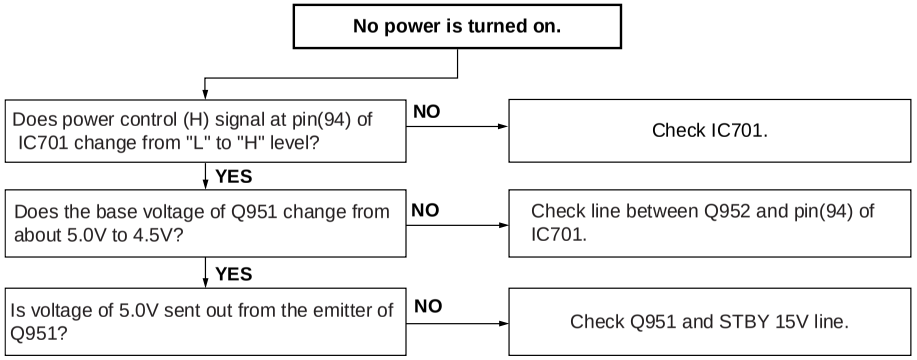
FLOW CHART NO.9 CASSETTE CONTROL TROUBLESHOOTING(2)


A cassette tape is taken in, but ejected at once.
Does the start sensor pulse at pin(79) of IC701 change from "L" to "H" level when the cassette tape is loaded?
NO
Check line between start sensor and pin(79) of IC701.
YES
Does the end sensor pulse at pin(85) of IC701 change from "L" to "H" level when the cassette tape is loaded?
NO
Check line between end sensor and pin(85) of IC701.
YES
Does the master cam mode shifter operate normally when the cassette tape is loaded?
NO
Check line between cam switchs (A)/(B) and pins (7)/(6) of IC701.
YES
Replace IC701.

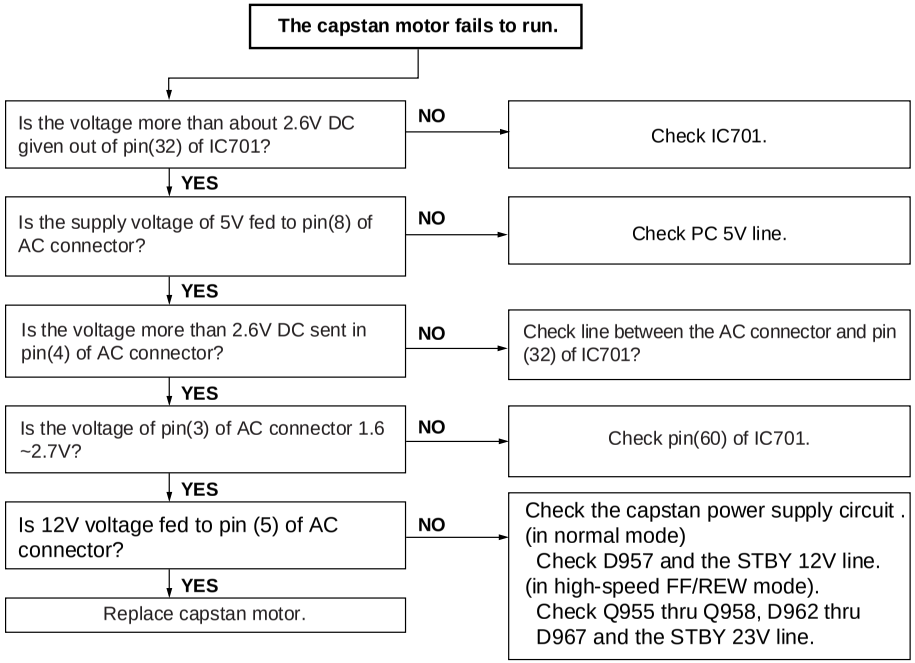
FLOW CHART NO.10 LOADING MOTOR AND EJECT TROUBLESHOOTING


The cassette tape fails to come out.
Does the capstan motor start when the EJECT button is pressed?
NO
See FLOW CHART NO.12 CAPSTAN MOTOR TROUBLESHOOTING
YES
Does the take-up reel disk turn when the capstan motor is running?
NO
Check reel disk and reel drive unit.
YES
With the take-up reel disk running, is the reel pulse signal being fed to pin (2) of IC701?
NO
Check line between pin(2) of IC701 and take-up reel sensor.
YES
Is the pin (4) of IC705 at "H" level(about 1.7V) when the reel pulsesignal is inputted?
NO
Check pin(92) of IC701.
YES
Is the voltage about 10V sent out from pin(7) of IC705?
NO
Check IC705.
YES
Is the specified voltage applied at the loading motor terminal?
NO
Check line between IC705 and loading motor.
YES
Does the loading motor run?
NO
Replace loading motor.
YES
Replace cassette cam, gear, etc.

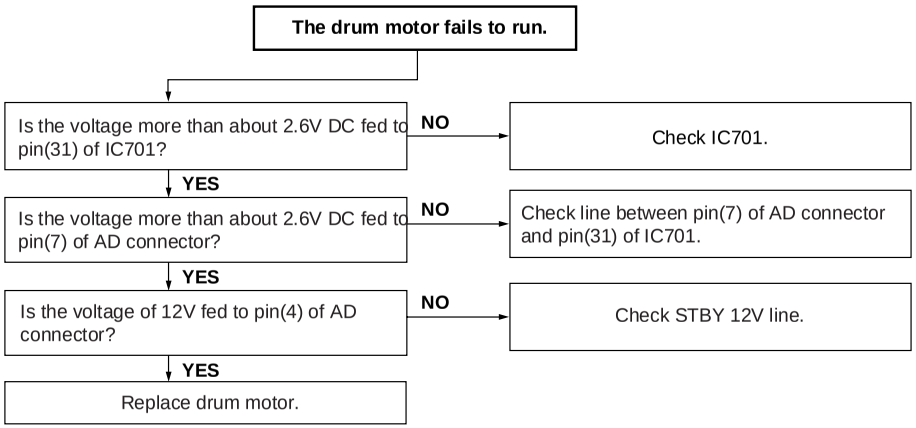
FLOW CHART NO.11 SYSTEM CONTROL TROUBLESHOOTING


No power is turned on.
Does power control (H) signal at pin(94) of IC701 change from "L" to "H" level?
NO
Check IC701.
YES
Does the base voltage of Q951 change from about 5.0V to 4.5V?
NO
Check line between Q952 and pin(94) of IC701.
YES
Is voltage of 5.0V sent out from the emitter of Q951?
NO
Check Q951 and STBY 15V line.

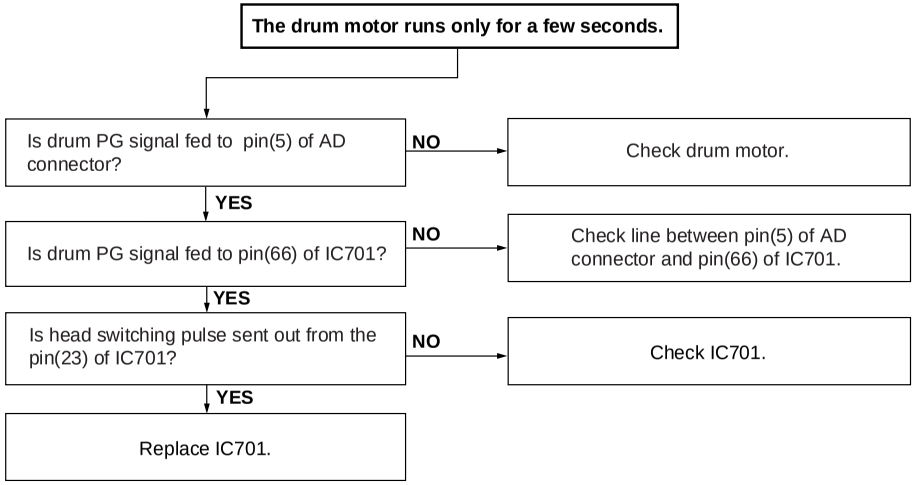
FLOW CHART NO.12 CAPSTAN MOTOR TROUBLESHOOTING


The capstan motor fails to run.
Is the voltage more than about 2.6V DC given out of pin(32) of IC701?
NO
Check IC701.
YES
Is the supply voltage of 5V fed to pin(8) of AC connector?
NO
Check PC 5V line.
YES
Is the voltage more than 2.6V DC sent in pin(4) of AC connector?
NO
Check line between the AC connector and pin (32) of IC701?
YES
Is the voltage of pin(3) of AC connector 1.6 ~2.7V?
NO
Check pin(60) of IC701.
YES
Is 12V voltage fed to pin (5) of AC connector?
NO
Check the capstan power supply circuit .
(in normal mode)
Check D957 and the STBY 12V line.
(in high-speed FF/REW mode).
Check Q955 thru Q958, D962 thru D967 and the STBY 23V line.
YES
Replace capstan motor.

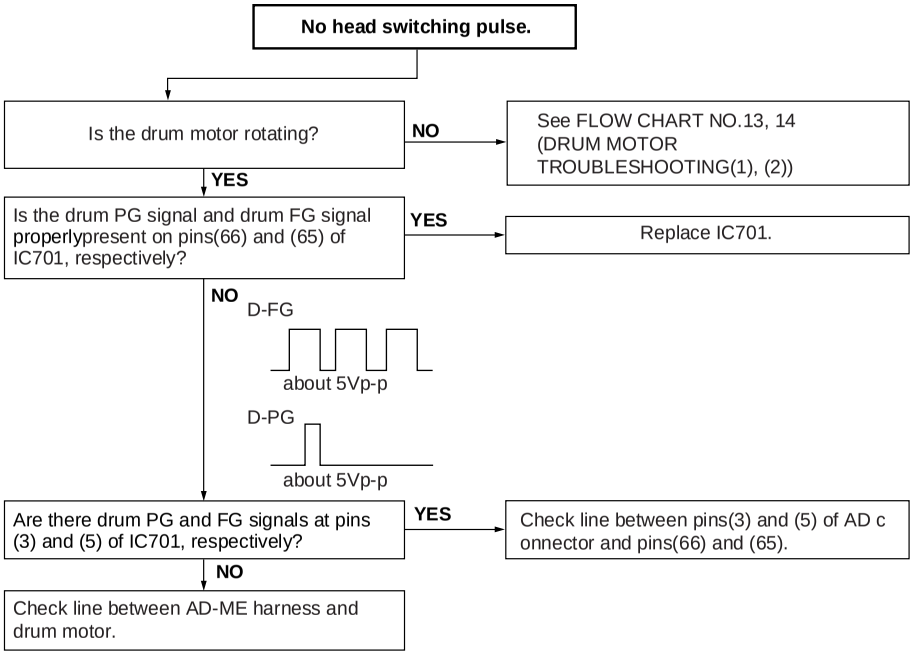
FLOW CHART NO.13 DRUM MOTOR TROUBLESHOOTING(1)


The drum motor fails to run.
Is the voltage more than about 2.6V DC fed to pin(31) of IC701?
NO
Check IC701.
YES
Is the voltage more than about 2.6V DC fed to pin(7) of AD connector?
NO
Check line between pin(7) of AD connector and pin(31) of IC701.
YES
Is the voltage of 12V fed to pin(4) of AD connector?
NO
Check STBY 12V line.
YES
Replace drum motor.

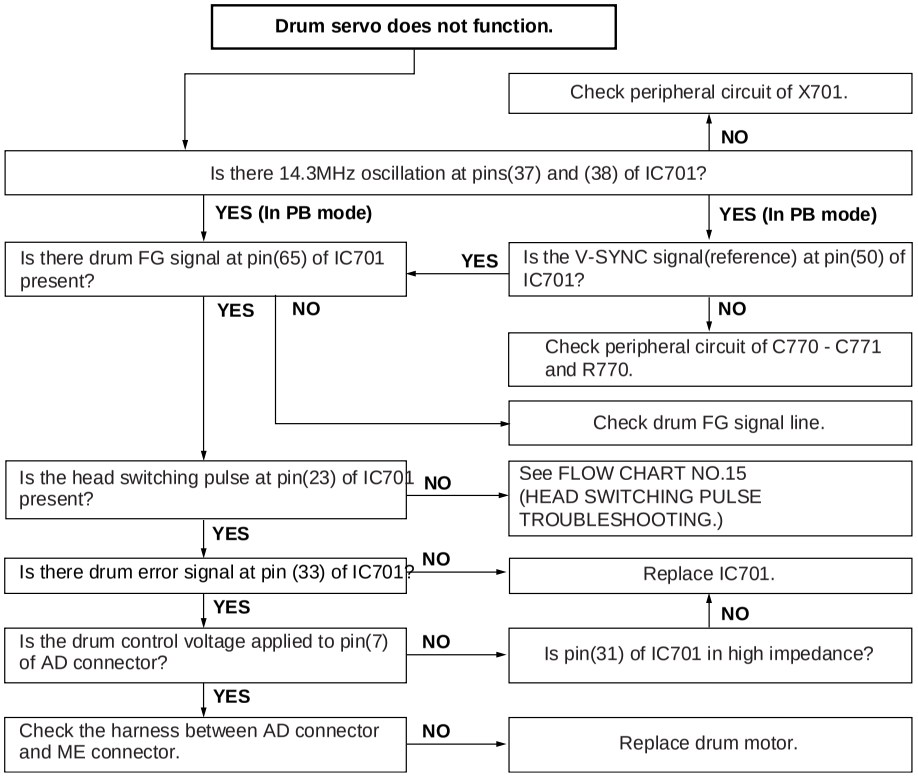
FLOW CHART NO.14 DRUM MOTOR TROUBLESHOOTING(2)


The drum motor runs only for a few seconds.
Is drum PG signal fed to pin(5) of AD connector?
NO
Check drum motor.
YES
Is drum PG signal fed to pin(66) of IC701?
NO
Check line between pin(5) of AD connector and pin(66) of IC701.
YES
Is head switching pulse sent out from the pin(23) of IC701?
NO
Check IC701.
YES
Replace IC701.

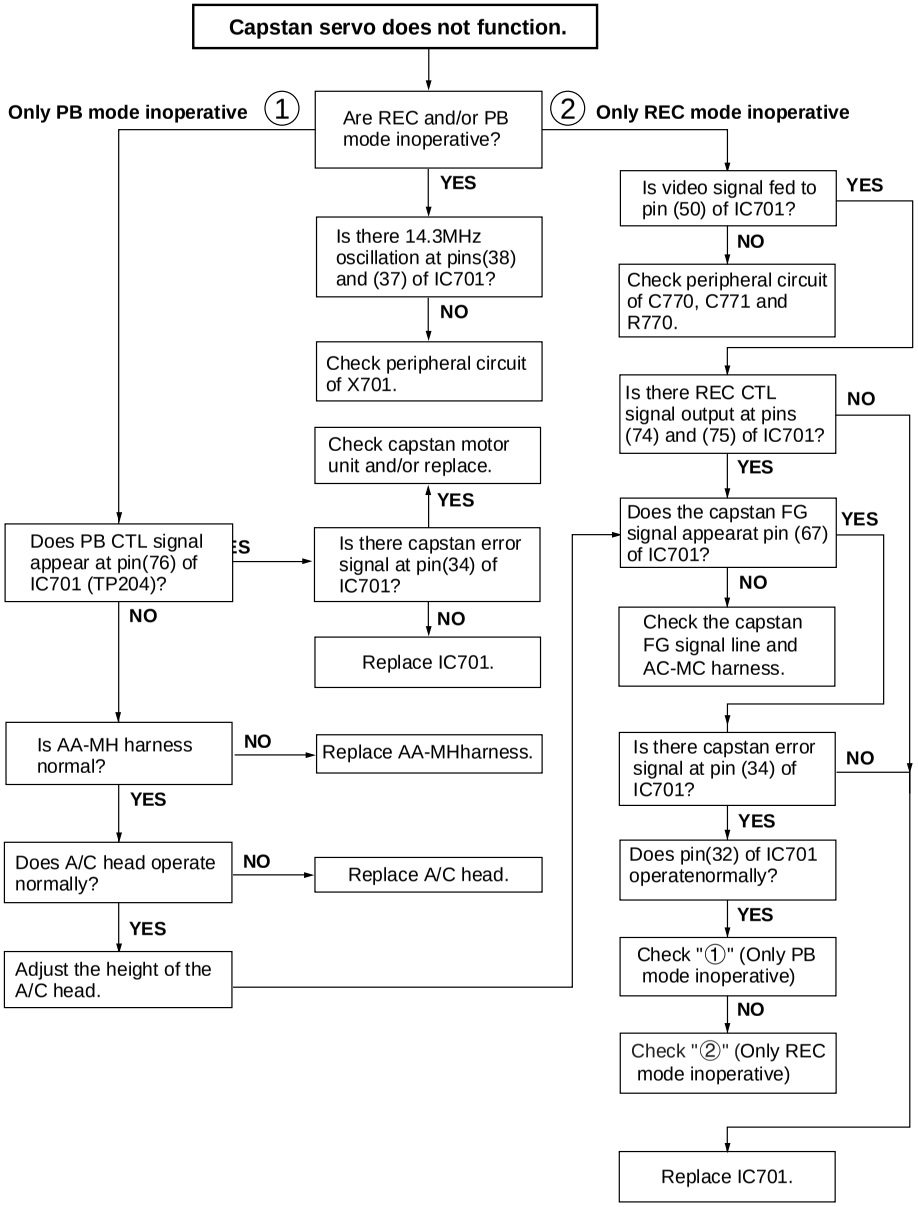
FLOW CHART NO.15 HEAD SWITCHING PULSE TROUBLESHOOTING.


No head switching pulse.
Is the drum motor rotating?
NO
See FLOW CHART NO.13, 14 (DRUM MOTOR TROUBLESHOOTING(1), (2))
YES
Is the drum PG signal and drum FG signal properlypresent on pins(66) and (65) of IC701, respectively?
YES
Replace IC701.
NO
D-FG
about 5Vp-p
D-PG
about 5Vp-p
Are there drum PG and FG signals at pins (3) and (5) of IC701, respectively?
YES
Check line between pins(3) and (5) of AD c onnector and pins(66) and (65).
NO
Check line between AD-ME harness and drum motor.

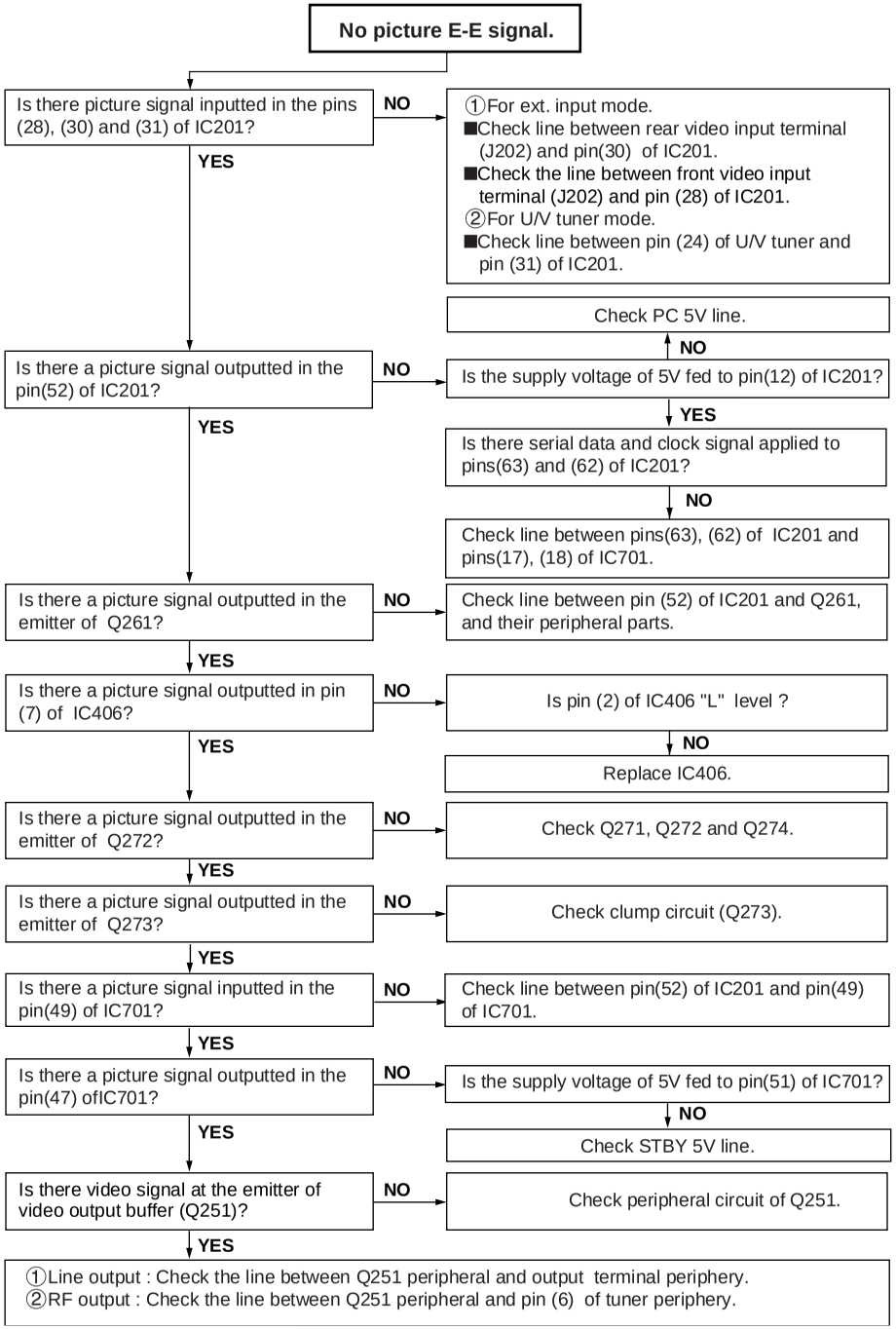
FLOW CHART NO.16 DRUM SERVO TROUBLESHOOTING


Drum servo does not function.
Check peripheral circuit of X701.
NO
Is there 14.3MHz oscillation at pins(37) and (38) of IC701?
YES (In PB mode)
YES (In PB mode)
Is there drum FG signal at pin(65) of IC701 present?
YES
Is the V-SYNC signal(reference) at pin(50) of IC701?
YES
NO
NO
Check peripheral circuit of C770 - C771 and R770.
Check drum FG signal line.
Is the head switching pulse at pin(23) of IC701 present?
NO
See FLOW CHART NO.15 (HEAD SWITCHING PULSE TROUBLESHOOTING.)
YES
Is there drum error signal at pin (33) of IC701?
NO
Replace IC701.
YES
NO
Is the drum control voltage applied to pin(7) of AD connector?
NO
Is pin(31) of IC701 in high impedance?
YES
Check the harness between AD connector and ME connector.
NO
Replace drum motor.

FLOW CHART NO.17 CAPSTAN SERVO TROUBLESHOOTING



FLOW CHART NO.18 E-E MODE TROUBLESHOOTING


No picture E-E signal.
Is there picture signal inputted in the pins (28), (30) and (31) of IC201?
NO
①For ext. input mode.
■Check line between rear video input terminal (J202) and pin(30) of IC201.
■Check the line between front video input terminal (J202) and pin (28) of IC201.
②For U/V tuner mode.
■Check line between pin (24) of U/V tuner and pin (31) of IC201.
YES
Is there a picture signal outputted in the pin(52) of IC201?
NO
Check PC 5V line.
NO
Is the supply voltage of 5V fed to pin(12) of IC201?
YES
Is there serial data and clock signal applied to pins(63) and (62) of IC201?
NO
Check line between pins(63), (62) of IC201 and pins(17), (18) of IC701.
YES
Is there a picture signal outputted in the emitter of Q261?
NO
Check line between pin (52) of IC201 and Q261, and their peripheral parts.
YES
Is there a picture signal outputted in pin (7) of IC406?
NO
Is pin (2) of IC406 "L" level ?
NO
Replace IC406.
YES
Is there a picture signal outputted in the emitter of Q272?
NO
Check Q271, Q272 and Q274.
YES
Is there a picture signal outputted in the emitter of Q273?
NO
Check clump circuit (Q273).
YES
Is there a picture signal inputted in the pin(49) of IC701?
NO
Check line between pin(52) of IC201 and pin(49) of IC701.
YES
Is there a picture signal outputted in the pin(47) ofIC701?
NO
Is the supply voltage of 5V fed to pin(51) of IC701?
NO
Check STBY 5V line.
YES
Is there video signal at the emitter of video output buffer (Q251)?
NO
Check peripheral circuit of Q251.
YES
①Line output : Check the line between Q251 peripheral and output terminal periphery.
②RF output : Check the line between Q251 peripheral and pin (6) of tuner periphery.

FLOW CHART NO.19 RECORDING MODE TROUBLESHOOTING

Picture (Luminance) record is impossible (E-E mode is possible).

Is there luminance signal (approx. 0.5Vp-p) input in the pin (19) of IC201?
- NO → Check line between pins (18) and (19) of IC 201. (C206)
- YES ↓

Is there luminance signal (approx. 0.3Vp-p) input in the pin (42) of IC201?
- NO → Check line between pins (21) and (42) of IC201 (C208).
- YES ↓

Is there luminance signal (approx. 0.5Vp-p) input in the pin (26) of IC201?
- NO → Check line between pins (39) and (26) of IC201 (C212).
  - YES ↓
  - Is there luminance signal (aprox. 0.5Vp-p) output from the pin (39) of IC201?
    - NO ↓
    - Is voltage 5V applied to the CCD section power terminal at pin (36) of IC201?
      - YES ↓
      - Is CCD control voltage approx. 5V normally to the pin (37) from pin (57) of IC201? Is clock signal (approx. 7.16MHz/0.5Vp-p) for CCD applied normally to the pin (44) from (69) of IC201?
        - NO → Is there chroma signal (approx. 180mVp-p /burst) output from the pin (35) of IC201?
          - YES ↑
          - Check line between pins (58) and (35) of IC201 (R505, C515).
            - NO → Is there chroma signal (approx.180mVp-p /burst) input in the pin (58) of IC201?
              - YES ↓
- YES ↓

Is there luminance signal (approx. 0.5Vp-p) input in the pin (23) of IC201?
- NO → Check line between pins (24) and (23) of IC201 (C210).
- YES ↓

Is there luminance signal (approx. 0.5Vp-p) input and output in the pins (13) and (14) of IC201, respectively?
- NO → Check peripheral circuit of pins (13) and (14) of IC201 (R201,R202, C203).
- YES ↓

SP mode:
Is there record FM signal (approx. 20mVp-p) output in the pins (88), (89) <<SP1>> and pins (86), (87) <<SP2>>of IC201?

EP mode:
Is there chroma ingredient included signal (approx. 20mVp-p) output in the pins (93), (94) <<EP1>> and pins (92), (91) <<EP 2>> of IC201?

- NO → Is the supply voltage of 5V (PRE/REV Vcc) fed to pin (90) of IC201?
  - YES ↓
  - Replace IC201.
- YES ↓

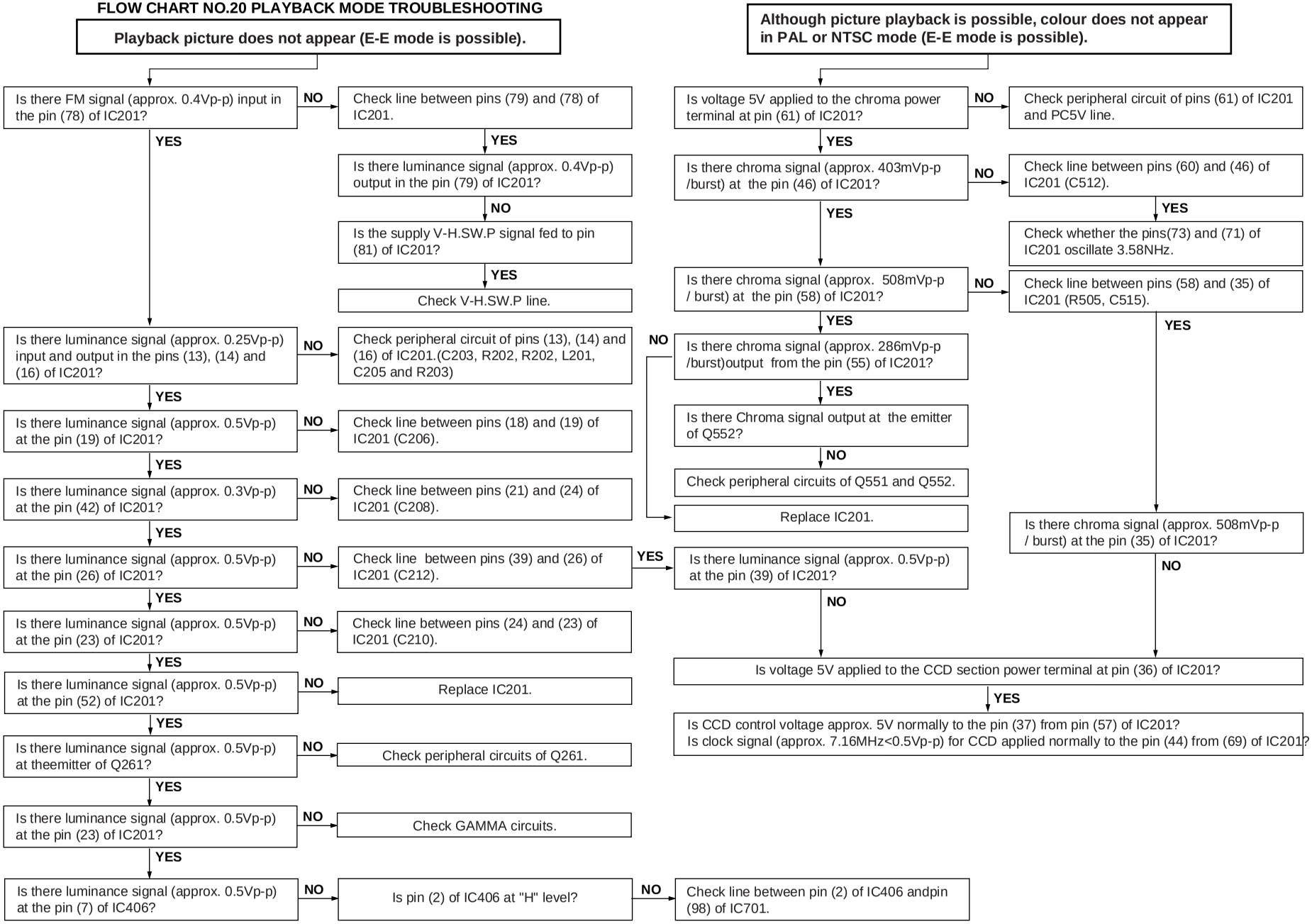
Check or replace the cylinder.

Although picture record is possible, colour does not appear (E-E mode is possible).

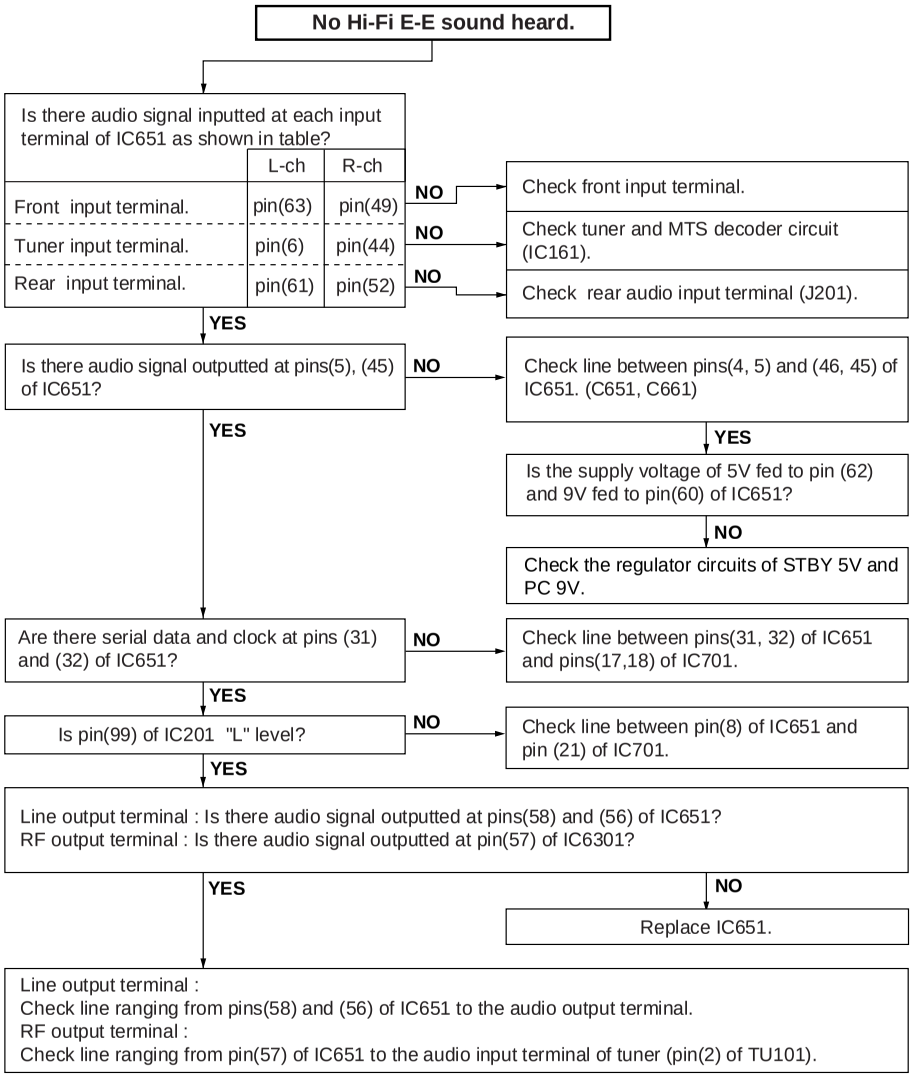
Is voltage of 5V applied to the chroma power terminal at pin (61) of IC201?
- NO → Check peripheral circuit pin (61) of IC201 and PC5V line.
- YES ↓

Is there chroma signal (approx. 143mVp-p/burst) input in the pin (46) of IC201?
- NO → Check line between pins (60) and (46) of IC201 (C512).
  - YES ↓
  - Check whether the pins(73) and (71) of IC201 oscillate 3.58NHz.
- YES ↓ (to Is there chroma signal (approx.180mVp-p /burst) input in the pin (58) of IC201?)

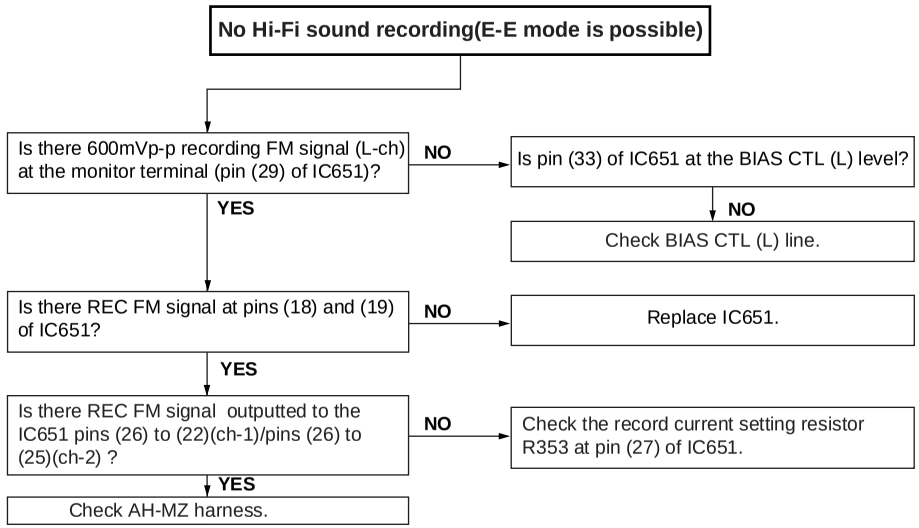
FLOW CHART NO.20 PLAYBACK MODE TROUBLESHOOTING


Playback picture does not appear (E-E mode is possible).
Is there FM signal (approx. 0.4Vp-p) input in the pin (78) of IC201?
NO
Check line between pins (79) and (78) of IC201.
YES
Is there luminance signal (approx. 0.4Vp-p) output in the pin (79) of IC201?
NO
Is the supply V-H.SW.P signal fed to pin (81) of IC201?
YES
Check V-H.SW.P line.
YES
Is there luminance signal (approx. 0.25Vp-p) input and output in the pins (13), (14) and (16) of IC201?
NO
Check peripheral circuit of pins (13), (14) and (16) of IC201.(C203, R202, R202, L201, C205 and R203)
YES
Is there luminance signal (approx. 0.5Vp-p) at the pin (19) of IC201?
NO
Check line between pins (18) and (19) of IC201 (C206).
YES
Is there luminance signal (approx. 0.3Vp-p) at the pin (42) of IC201?
NO
Check line between pins (21) and (24) of IC201 (C208).
YES
Is there luminance signal (approx. 0.5Vp-p) at the pin (26) of IC201?
NO
Check line between pins (39) and (26) of IC201 (C212).
YES
Is there luminance signal (approx. 0.5Vp-p) at the pin (23) of IC201?
NO
Check line between pins (24) and (23) of IC201 (C210).
YES
Is there luminance signal (approx. 0.5Vp-p) at the pin (52) of IC201?
NO
Replace IC201.
YES
Is there luminance signal (approx. 0.5Vp-p) at theemitter of Q261?
NO
Check peripheral circuits of Q261.
YES
Is there luminance signal (approx. 0.5Vp-p) at the pin (23) of IC201?
NO
Check GAMMA circuits.
YES
Is there luminance signal (approx. 0.5Vp-p) at the pin (7) of IC406?
NO
Is pin (2) of IC406 at "H" level?
NO
Check line between pin (2) of IC406 andpin (98) of IC701.
Although picture playback is possible, colour does not appear in PAL or NTSC mode (E-E mode is possible).
Is voltage 5V applied to the chroma power terminal at pin (61) of IC201?
NO
Check peripheral circuit of pins (61) of IC201 and PC5V line.
YES
Is there chroma signal (approx. 403mVp-p /burst) at the pin (46) of IC201?
NO
Check line between pins (60) and (46) of IC201 (C512).
YES
Check whether the pins(73) and (71) of IC201 oscillate 3.58NHz.
Is there chroma signal (approx. 508mVp-p / burst) at the pin (58) of IC201?
NO
Check line between pins (58) and (35) of IC201 (R505, C515).
YES
NO
Is there chroma signal (approx. 286mVp-p /burst)output from the pin (55) of IC201?
YES
Is there Chroma signal output at the emitter of Q552?
NO
Check peripheral circuits of Q551 and Q552.
Replace IC201.
YES
Is there chroma signal (approx. 508mVp-p / burst) at the pin (35) of IC201?
NO
YES
Is there luminance signal (approx. 0.5Vp-p) at the pin (39) of IC201?
NO
Is voltage 5V applied to the CCD section power terminal at pin (36) of IC201?
YES
Is CCD control voltage approx. 5V normally to the pin (37) from pin (57) of IC201?
Is clock signal (approx. 7.16MHz<0.5Vp-p) for CCD applied normally to the pin (44) from (69) of IC201?

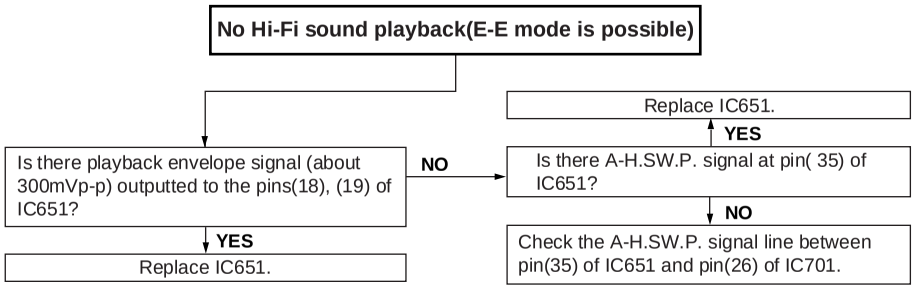
FLOW CHART NO.21 Hi-Fi SOUND MODE TROUBLESHOOTING(1)


No Hi-Fi E-E sound heard.
Is there audio signal inputted at each input terminal of IC651 as shown in table?
L-ch
R-ch
Front input terminal.
pin(63)
pin(49)
Tuner input terminal.
pin(6)
pin(44)
Rear input terminal.
pin(61)
pin(52)
NO
Check front input terminal.
Check tuner and MTS decoder circuit (IC161).
Check rear audio input terminal (J201).
YES
Is there audio signal outputted at pins(5), (45) of IC651?
Check line between pins(4, 5) and (46, 45) of IC651. (C651, C661)
Is the supply voltage of 5V fed to pin (62) and 9V fed to pin(60) of IC651?
Check the regulator circuits of STBY 5V and PC 9V.
Are there serial data and clock at pins (31) and (32) of IC651?
Check line between pins(31, 32) of IC651 and pins(17,18) of IC701.
Is pin(99) of IC201 "L" level?
Check line between pin(8) of IC651 and pin (21) of IC701.
Line output terminal : Is there audio signal outputted at pins(58) and (56) of IC651?
RF output terminal : Is there audio signal outputted at pin(57) of IC6301?
Replace IC651.
Line output terminal :
Check line ranging from pins(58) and (56) of IC651 to the audio output terminal.
RF output terminal :
Check line ranging from pin(57) of IC651 to the audio input terminal of tuner (pin(2) of TU101).

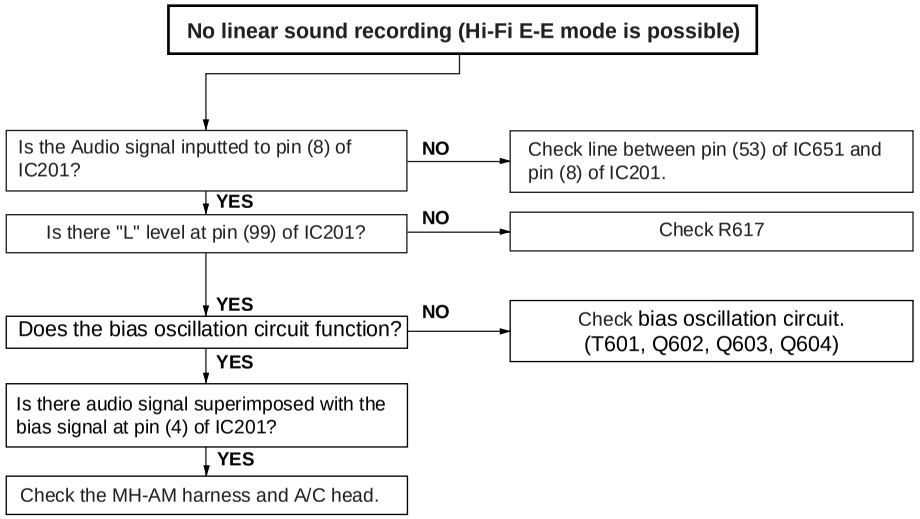
FLOW CHART NO.22 Hi-Fi SOUND MODE TROUBLESHOOTING(2)


No Hi-Fi sound recording(E-E mode is possible)
Is there 600mVp-p recording FM signal (L-ch) at the monitor terminal (pin (29) of IC651)?
Is pin (33) of IC651 at the BIAS CTL (L) level?
Check BIAS CTL (L) line.
Is there REC FM signal at pins (18) and (19) of IC651?
Replace IC651.
Is there REC FM signal outputted to the IC651 pins (26) to (22)(ch-1)/pins (26) to (25)(ch-2) ?
Check the record current setting resistor R353 at pin (27) of IC651.
Check AH-MZ harness.

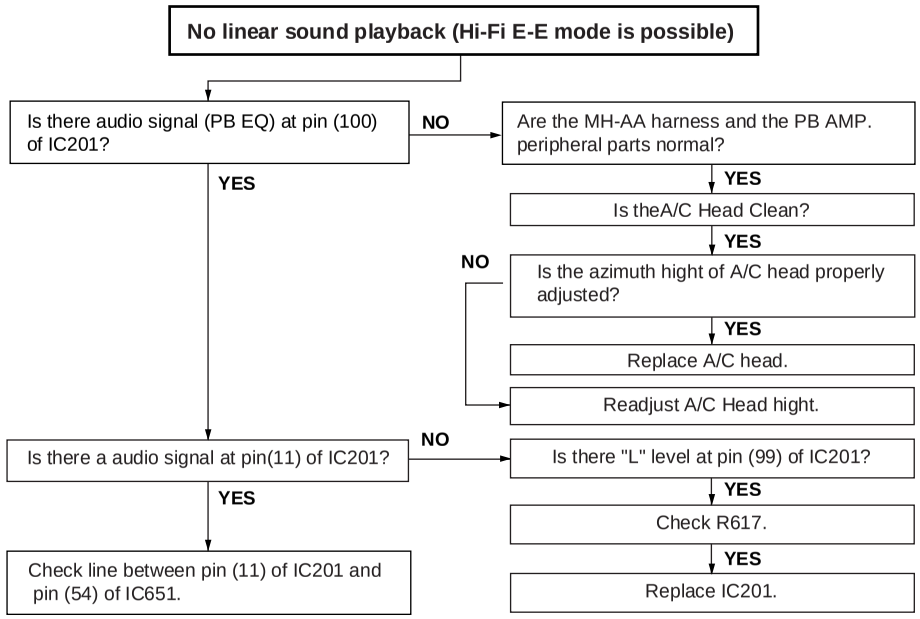
FLOW CHART NO.23 Hi-Fi SOUND MODE TROUBLESHOOTING(3)


No Hi-Fi sound playback(E-E mode is possible)
Replace IC651.
Is there playback envelope signal (about 300mVp-p) outputted to the pins(18), (19) of IC651?
Is there A-H.SW.P. signal at pin(35) of IC651?
Check the A-H.SW.P. signal line between pin(35) of IC651 and pin(26) of IC701.
Replace IC651.

FLOW CHART NO.24 LINEAR SOUND MODE TROUBLESHOOTING (1)


No linear sound recording (Hi-Fi E-E mode is possible)
Is the Audio signal inputted to pin (8) of IC201?
NO
Check line between pin (53) of IC651 and pin (8) of IC201.
YES
Is there "L" level at pin (99) of IC201?
NO
Check R617
YES
Does the bias oscillation circuit function?
NO
Check bias oscillation circuit. (T601, Q602, Q603, Q604)
YES
Is there audio signal superimposed with the bias signal at pin (4) of IC201?
YES
Check the MH-AM harness and A/C head.

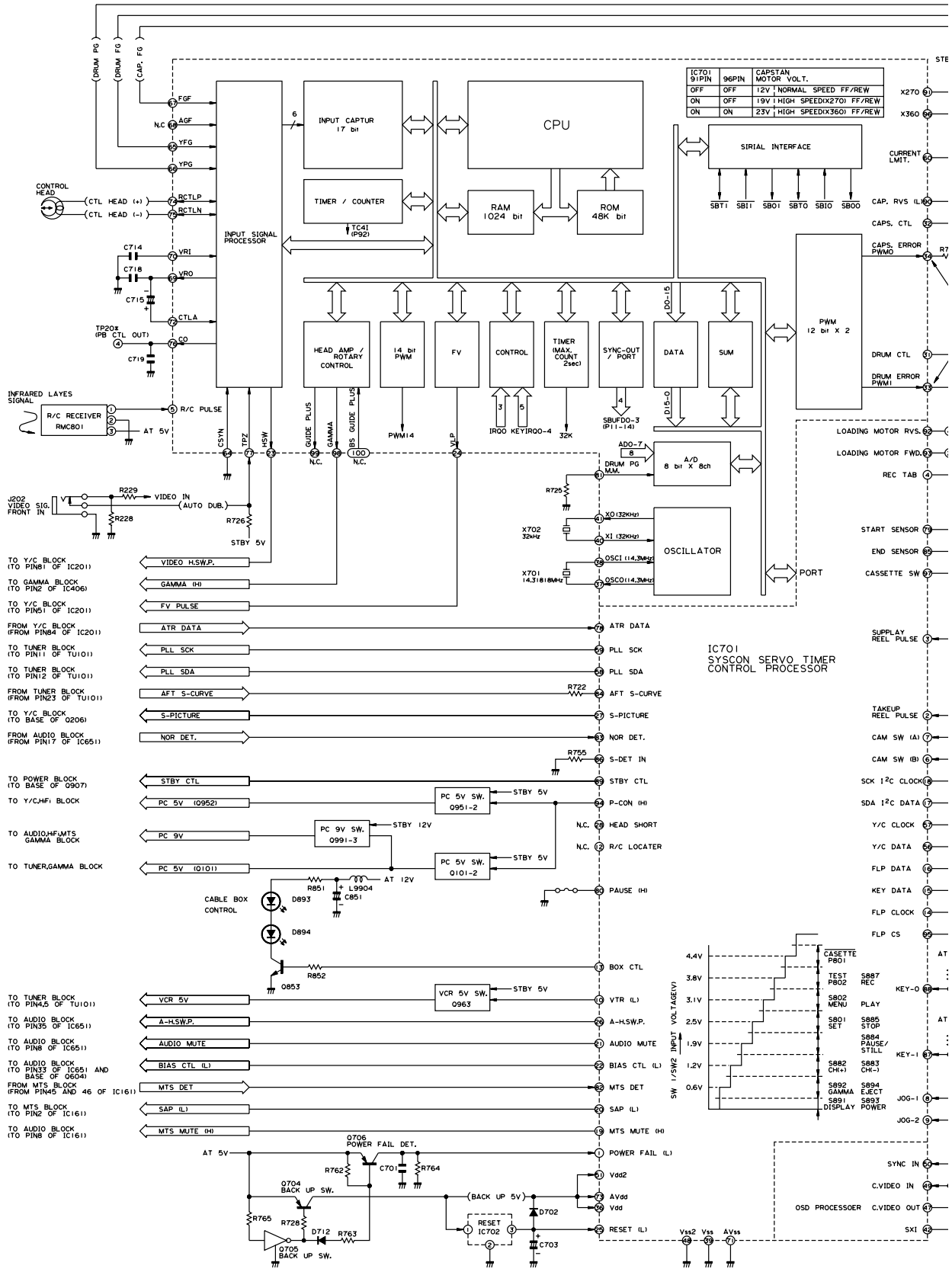
FLOW CHART NO.25 LINEAR SOUND MODE TROUBLESHOOTING (2)

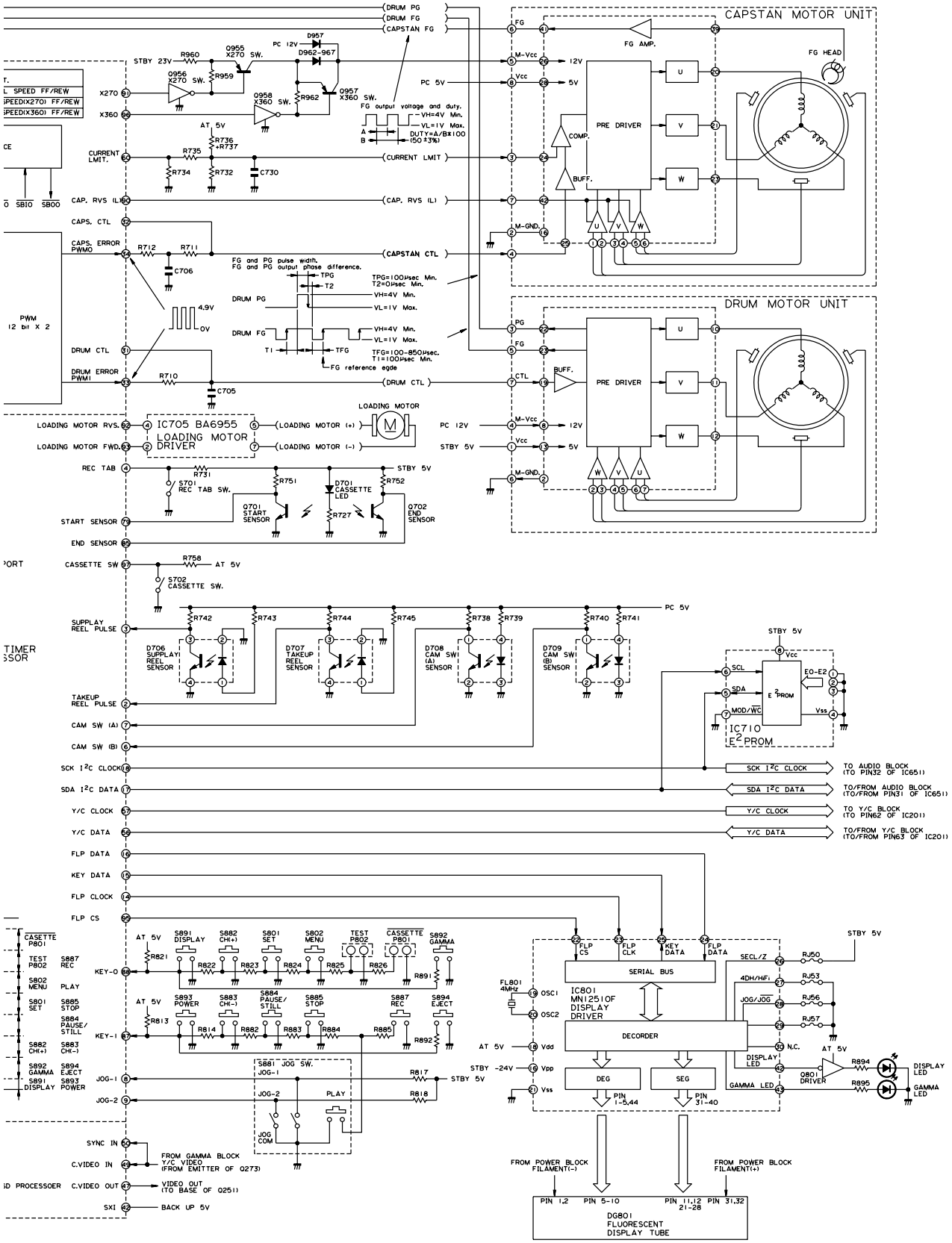

No linear sound playback (Hi-Fi E-E mode is possible)
Is there audio signal (PB EQ) at pin (100) of IC201?
NO
Are the MH-AA harness and the PB AMP. peripheral parts normal?
YES
Is theA/C Head Clean?
YES
NO
Is the azimuth hight of A/C head properly adjusted?
YES
Replace A/C head.
Readjust A/C Head hight.
YES
Is there a audio signal at pin(11) of IC201?
NO
Is there "L" level at pin (99) of IC201?
YES
Check R617.
YES
Check line between pin (11) of IC201 and pin (54) of IC651.
YES
Replace IC201.

MEMO

5. BLOCK DIAGRAMS

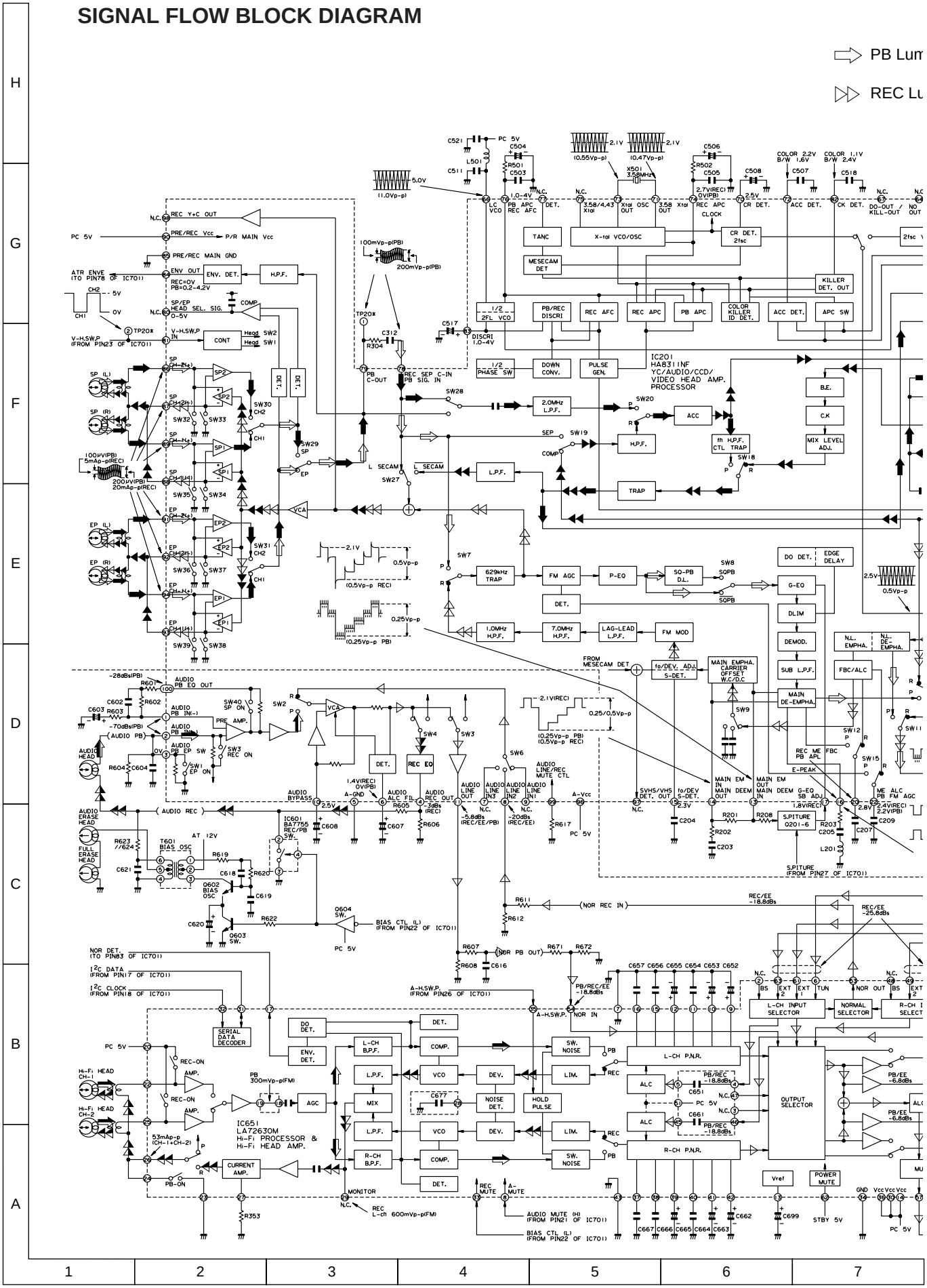
SERVO BLOCK DIAGRAM





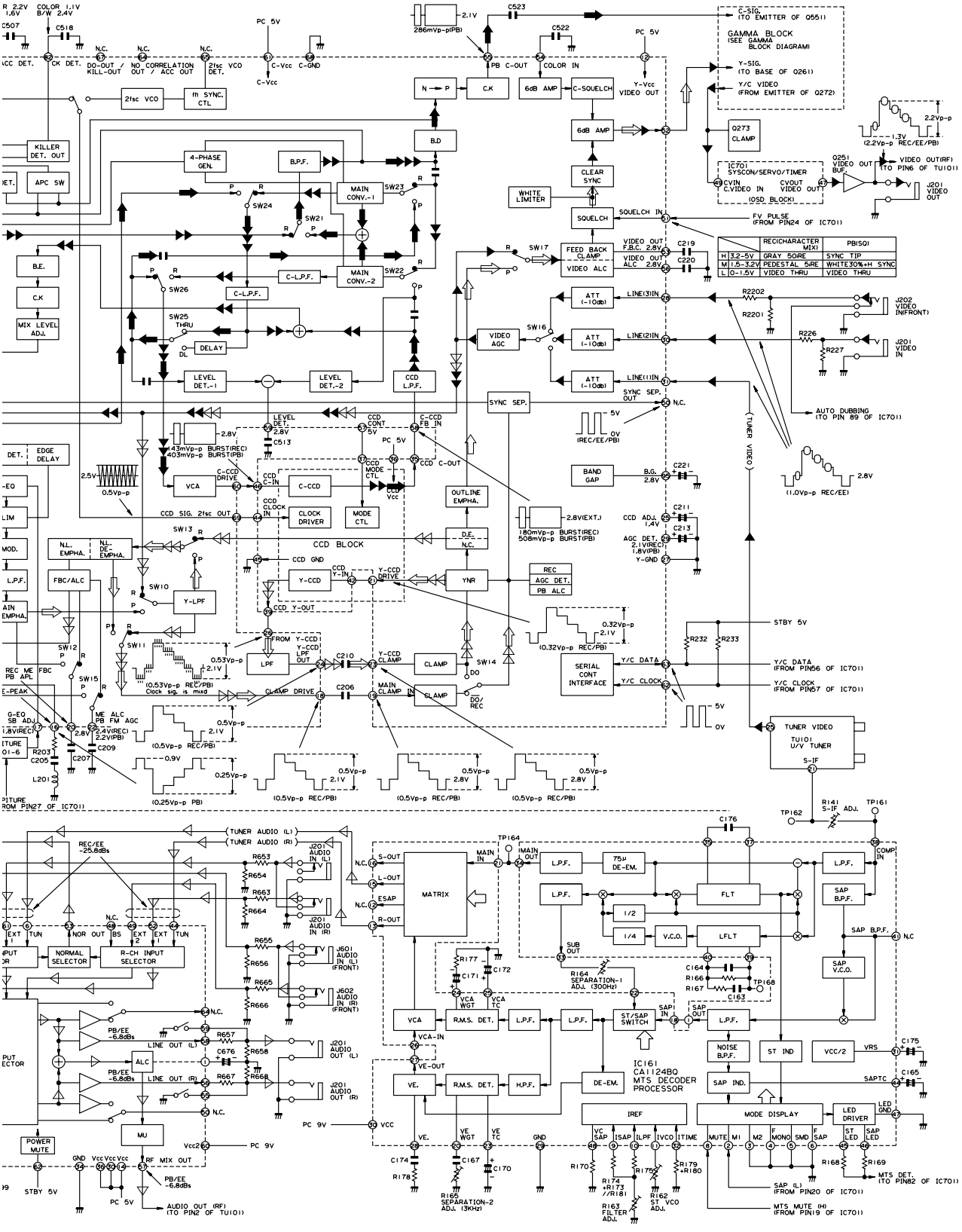
7	8	9	10	11	12	13

SIGNAL FLOW BLOCK DIAGRAM



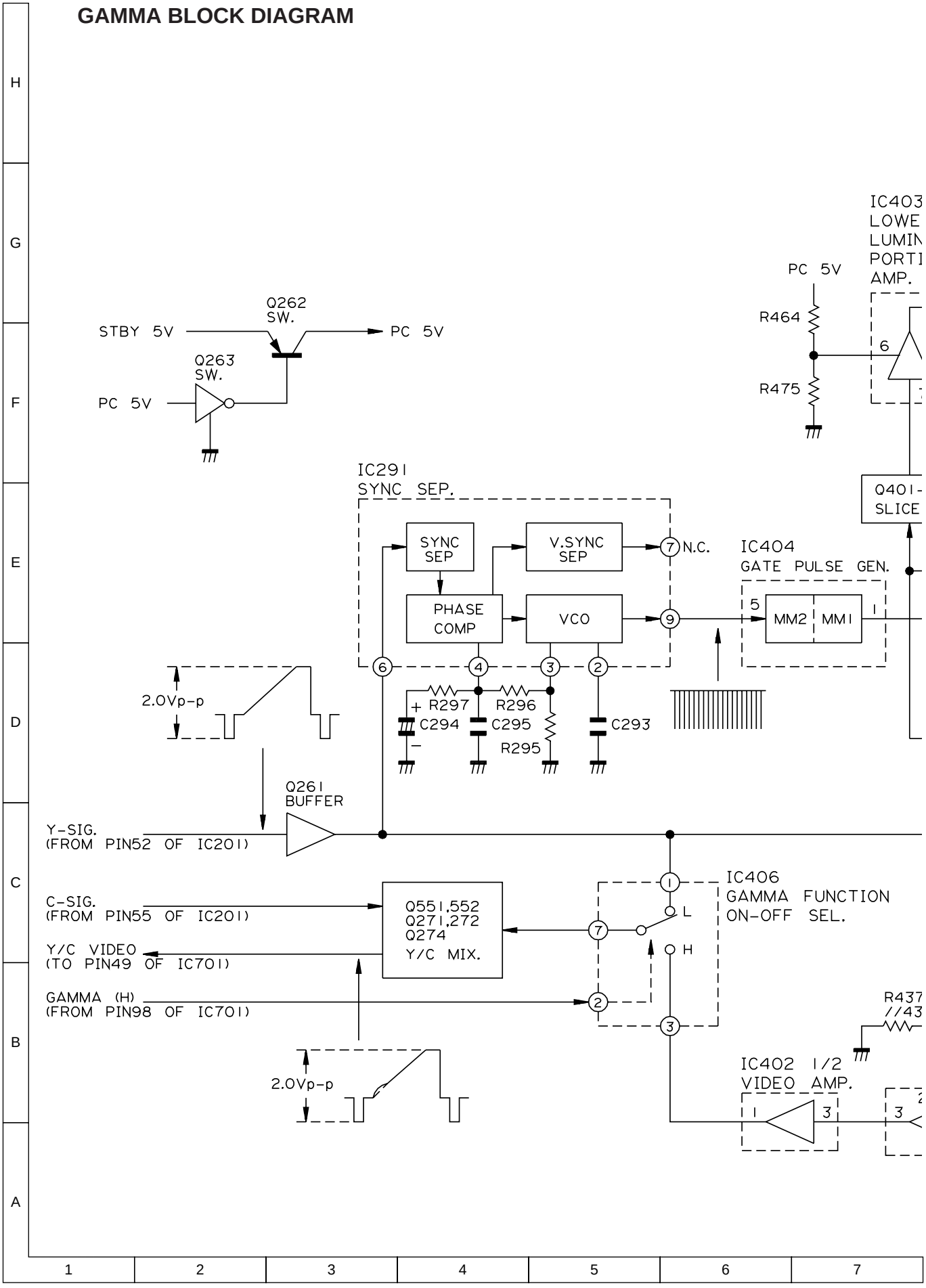
PB Luminance Signal PB Chrominance Signal Audio Playback Signal E-E Signal

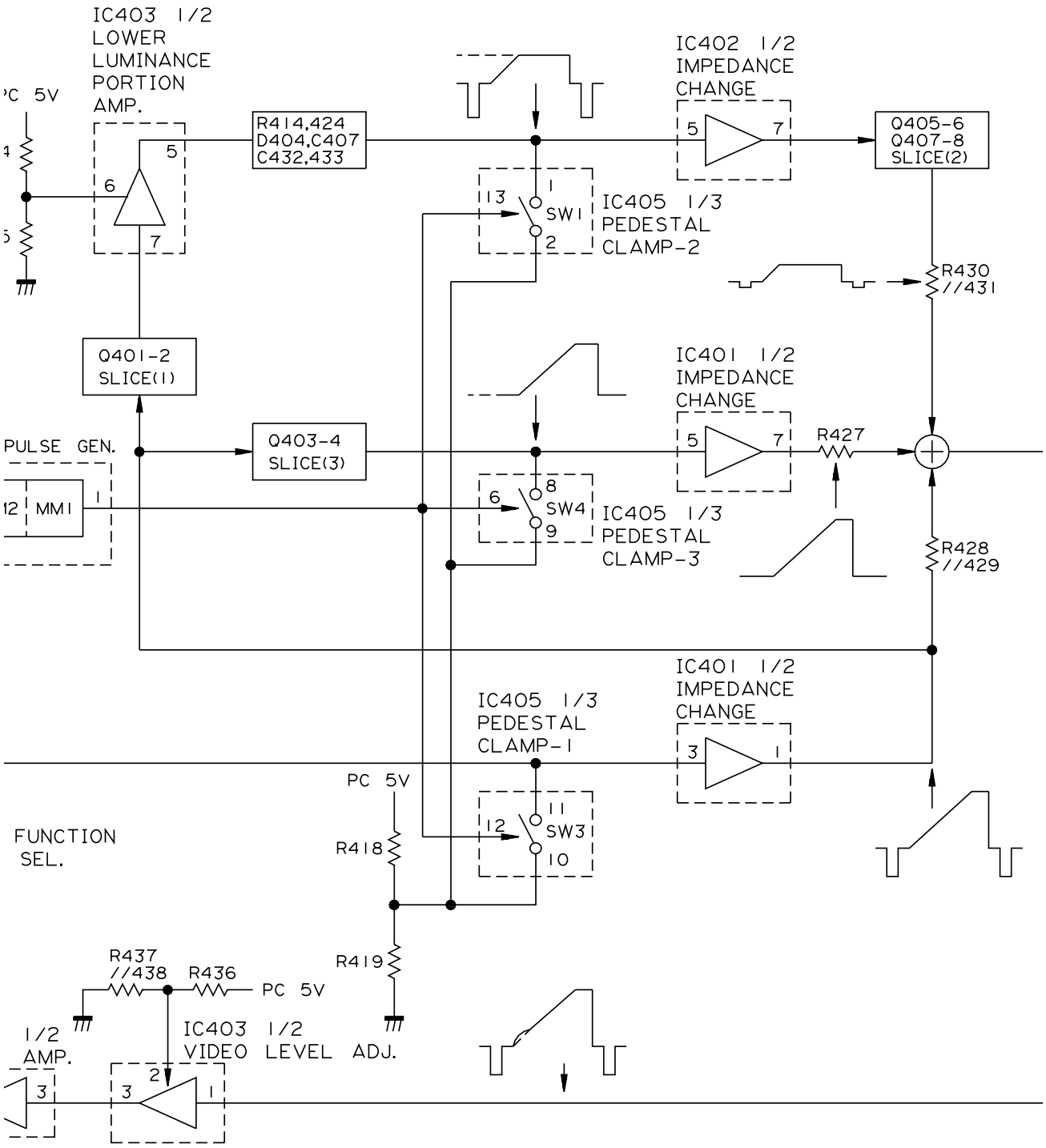
REC Luminance Signal REC Chrominance Signal Audio Record Signal Audio E-E Signal



7	8	9	10	11	12	13

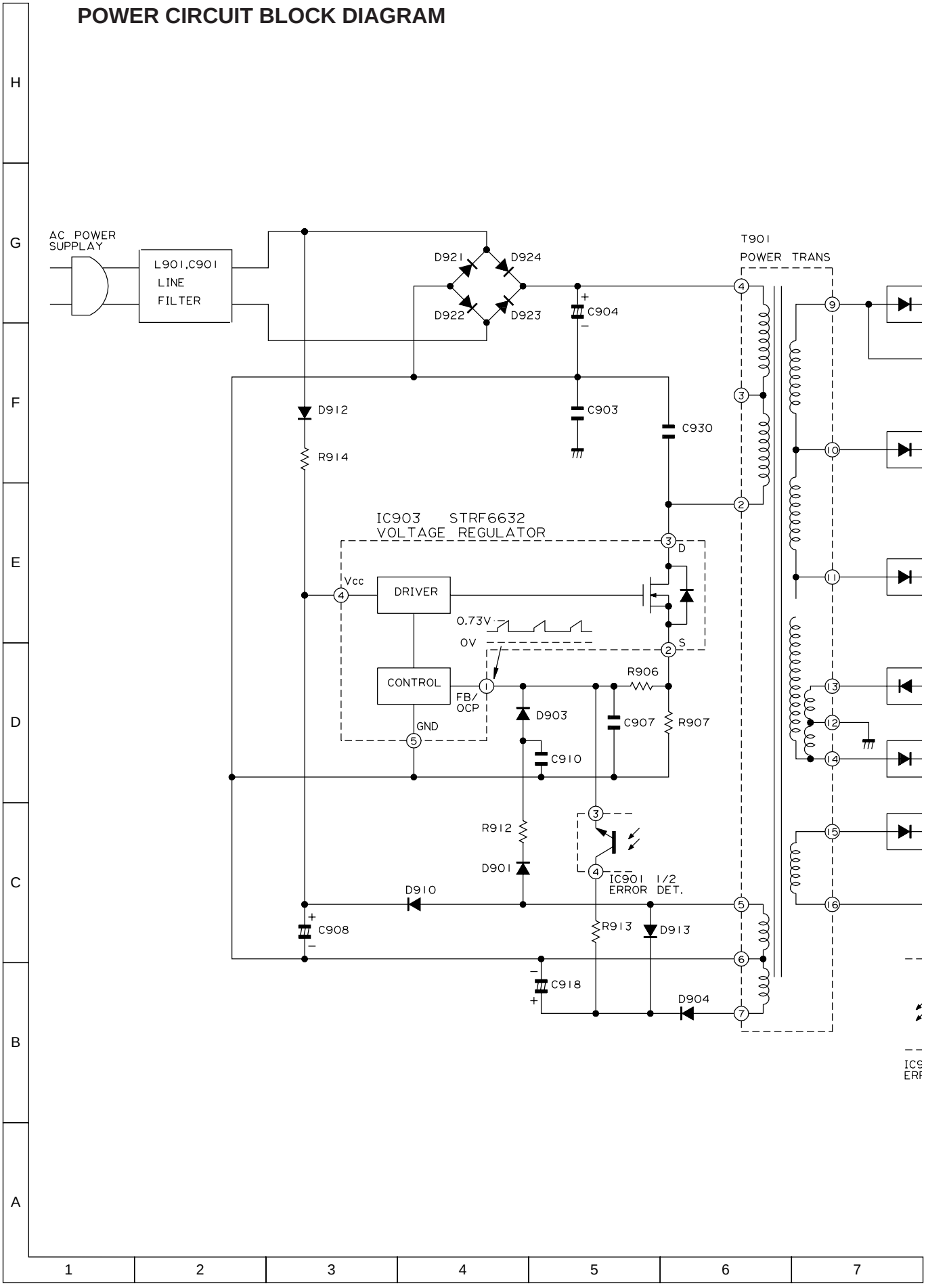
GAMMA BLOCK DIAGRAM

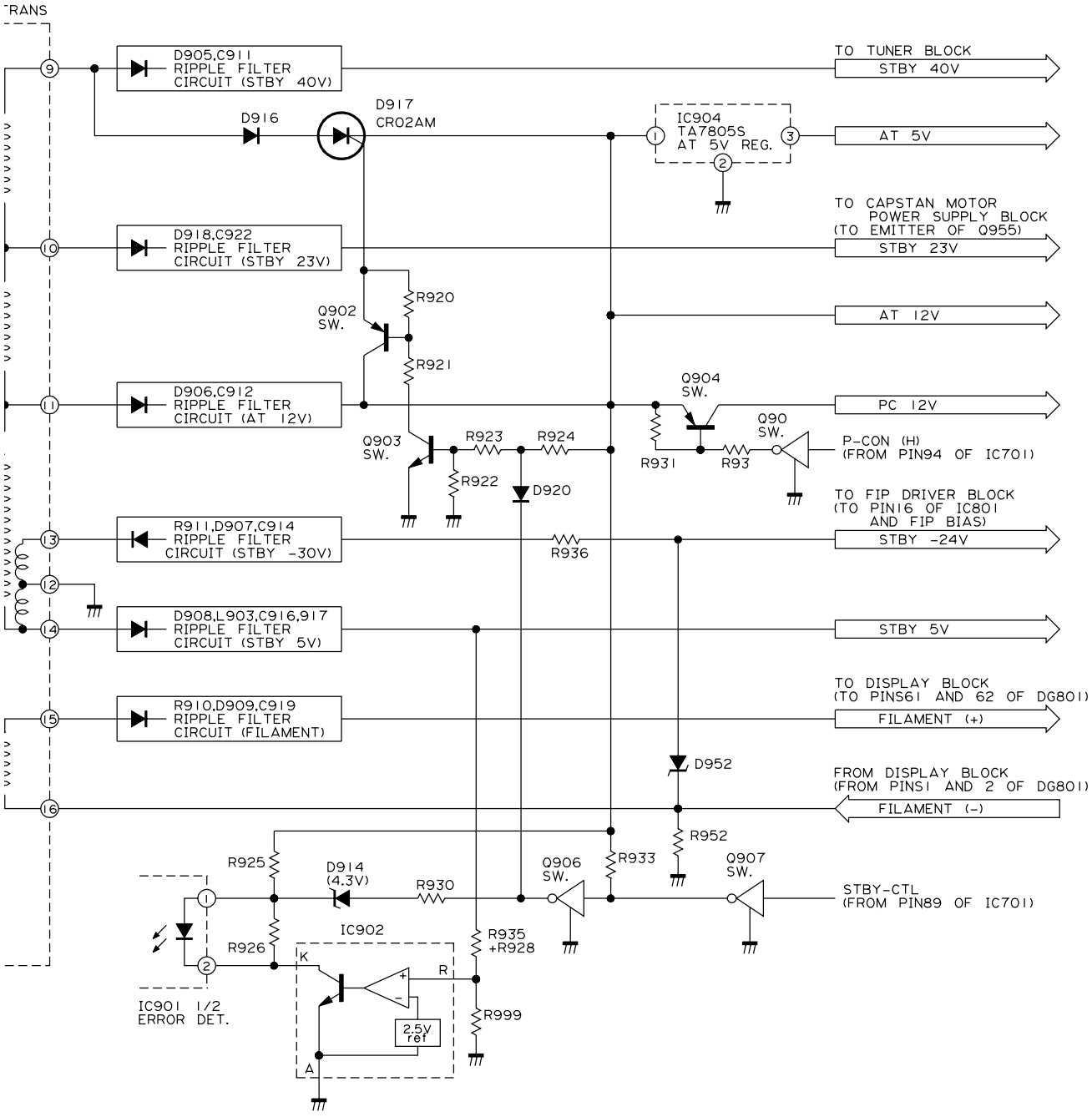




7	8	9	10	11	12	13

POWER CIRCUIT BLOCK DIAGRAM





7	8	9	10	11	12	13

SCHEMATIC DIAGRAM

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH " ⚠ " (▭) ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET.
BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

AVIS DE SECURITE IMPORTANT:

LES PIECES MARQUEES " ⚠ " (▭) SONT IMPORTANTES POUR MAINTENIR LA SECURITE DE L'APPAREIL.
NE REMPLACER CES PIECES QUE PAR DES PIECES DONT LE NUMERO EST SPECIFIE POUR MAINTENIR LA SECURITE ET PROTEGER LE BON FONCTIONNEMENT DE L'APPAREIL.

- *The indicated voltages in the following diagram are measured with an SSVM, upon receiving color bars (400 Hz sound signal) in either the record mode or the play mode voltage is indicated as follows.*

  4.0 . . . . *Record mode (SP)*
  (4.0) . . . . *PB mode (SP)*
  4.0 . . . . *LP mode*
  4.0 . . . . *EP mode*

NOTE:

1. *The unit of resistance "ohm" is omitted (K: 1000 ohms M: 1 Meg ohm).*
2. *All resistors are 1/8 watt, unless otherwise noted.*
3. *All capacitors μF, unless otherwise noted P: μμF.*

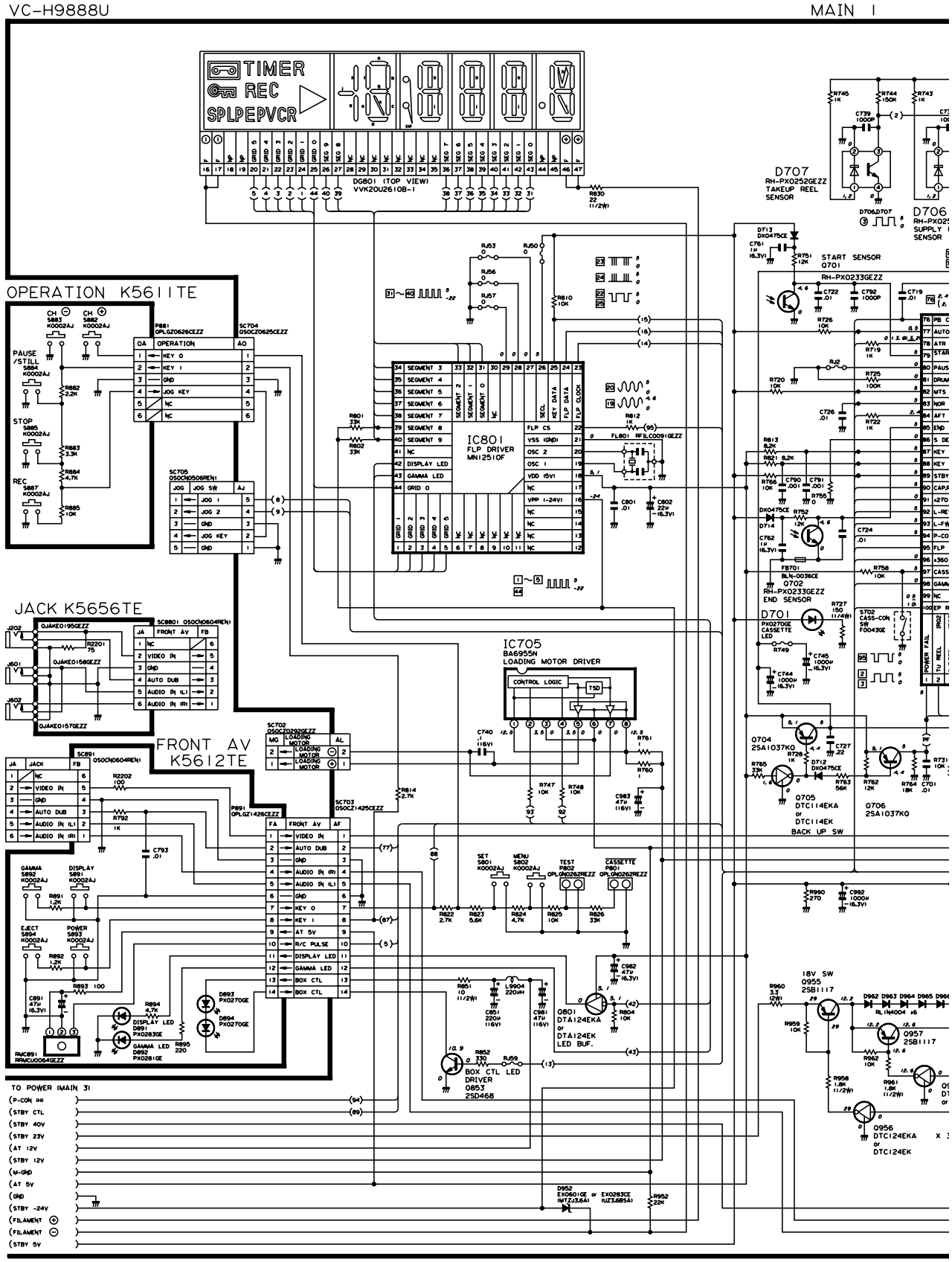
Voltages and waveform are measured as follows:

- *DC voltages are measured with an SSVM placed between points indicated and chassis ground, with the supply voltage of 120V AC and all controls for normal positions.*

This circuit diagram is a standard one, actual circuits printed may be subject to change for product improvement without prior notice.

9. CIRCUIT DIAGRAM AND PWB FOIL PATTERN

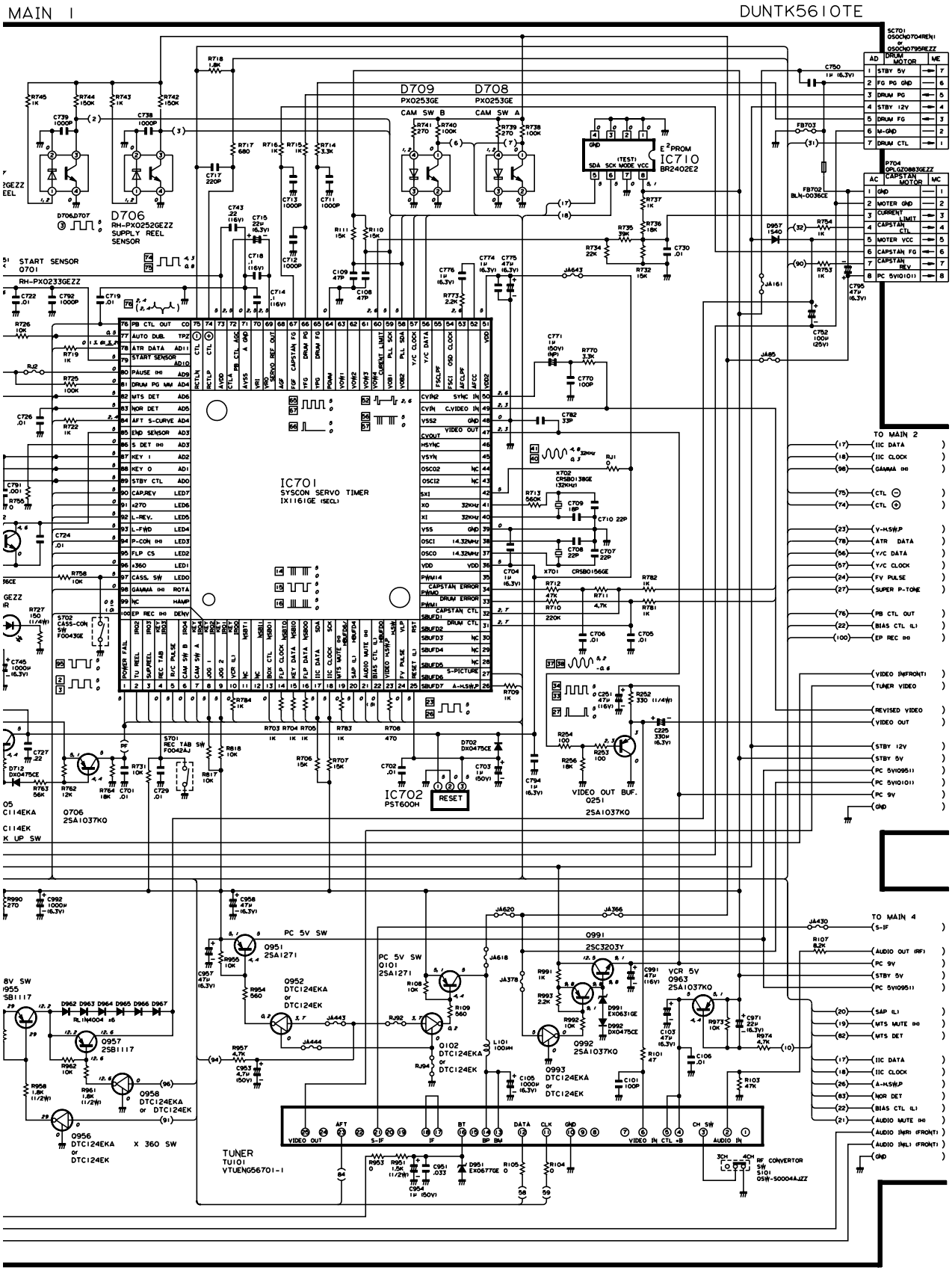
MAIN CIRCUIT (1)



*** VOLTAGE MEASUREMENT MODE**

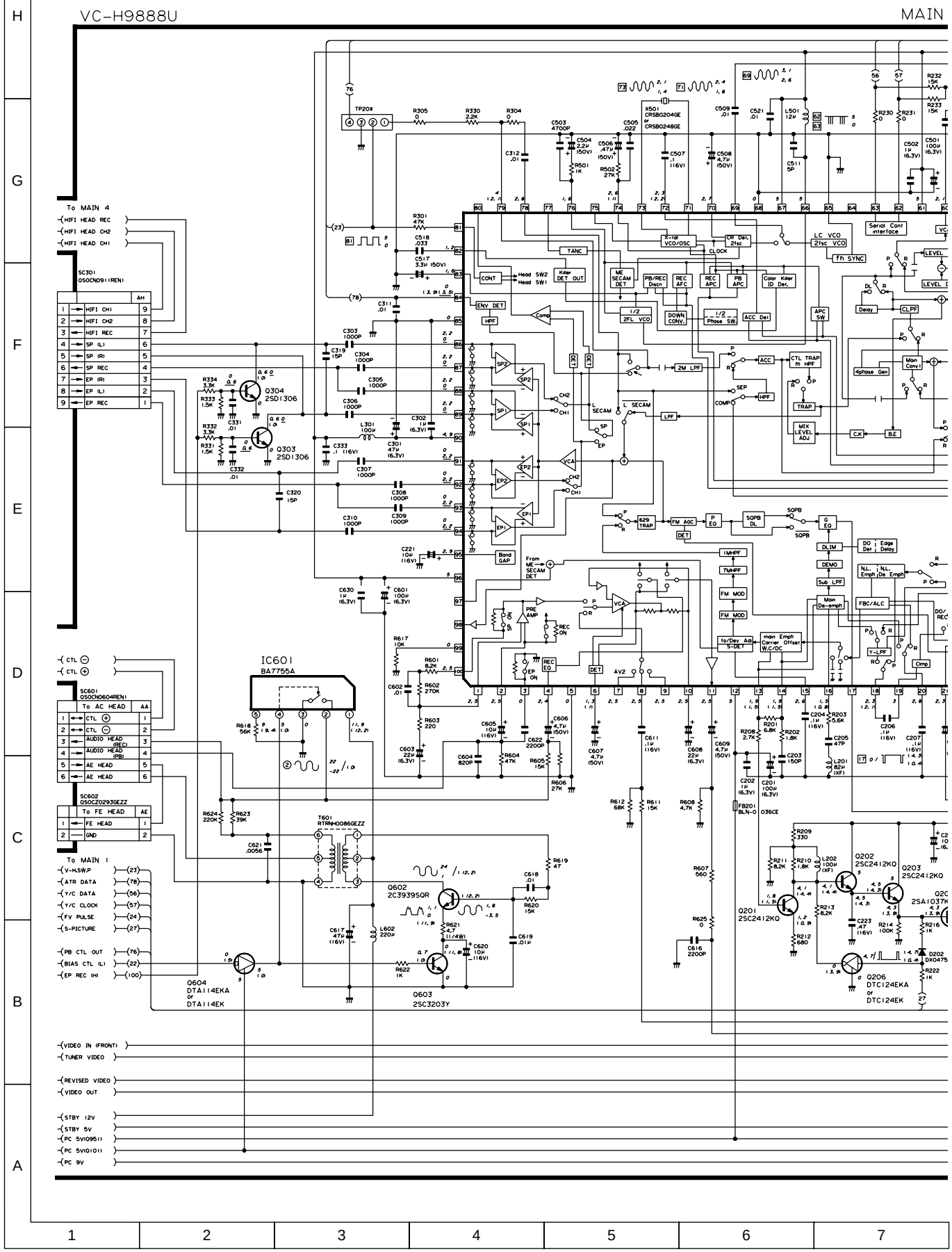
PB Parentheses ( )

REC Without Parentheses



7	8	9	10	11	12	13

MAIN CIRCUIT (2)



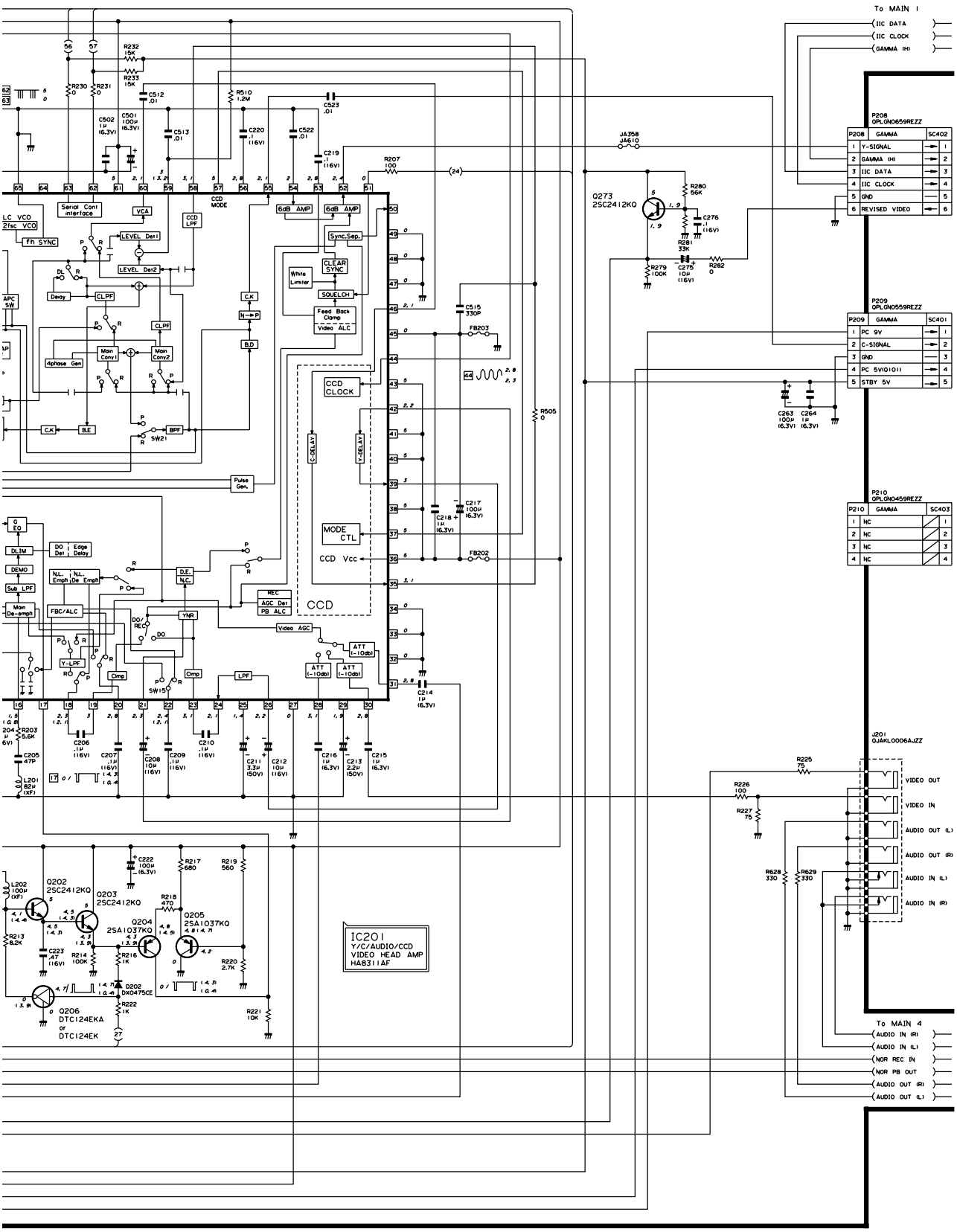
1	2	3	4	5	6	7

*** VOLTAGE MEASUREMENT MODE**

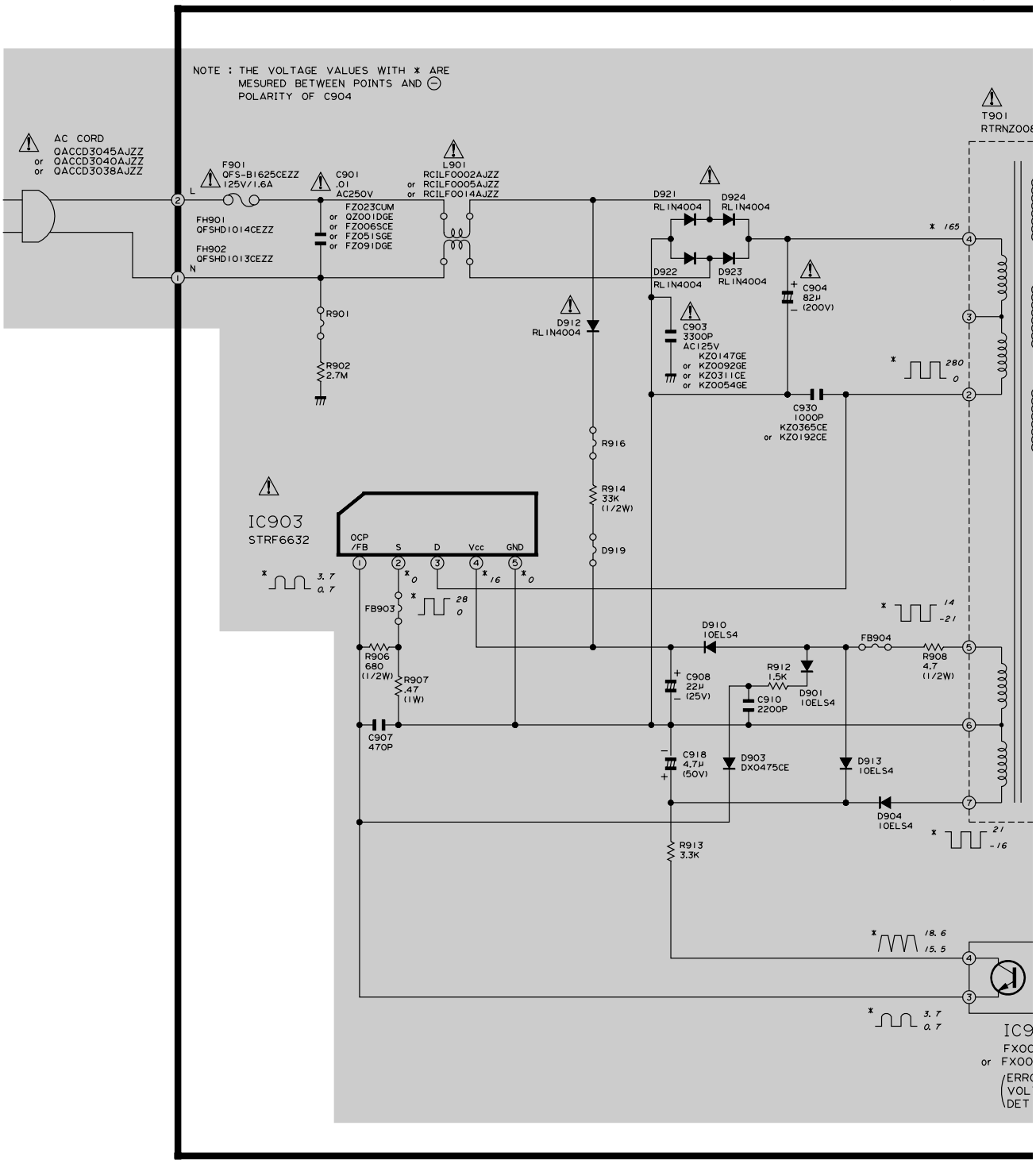
PB Parentheses ( )

REC Without Parentheses

MAIN 2 DUNTK561OTE

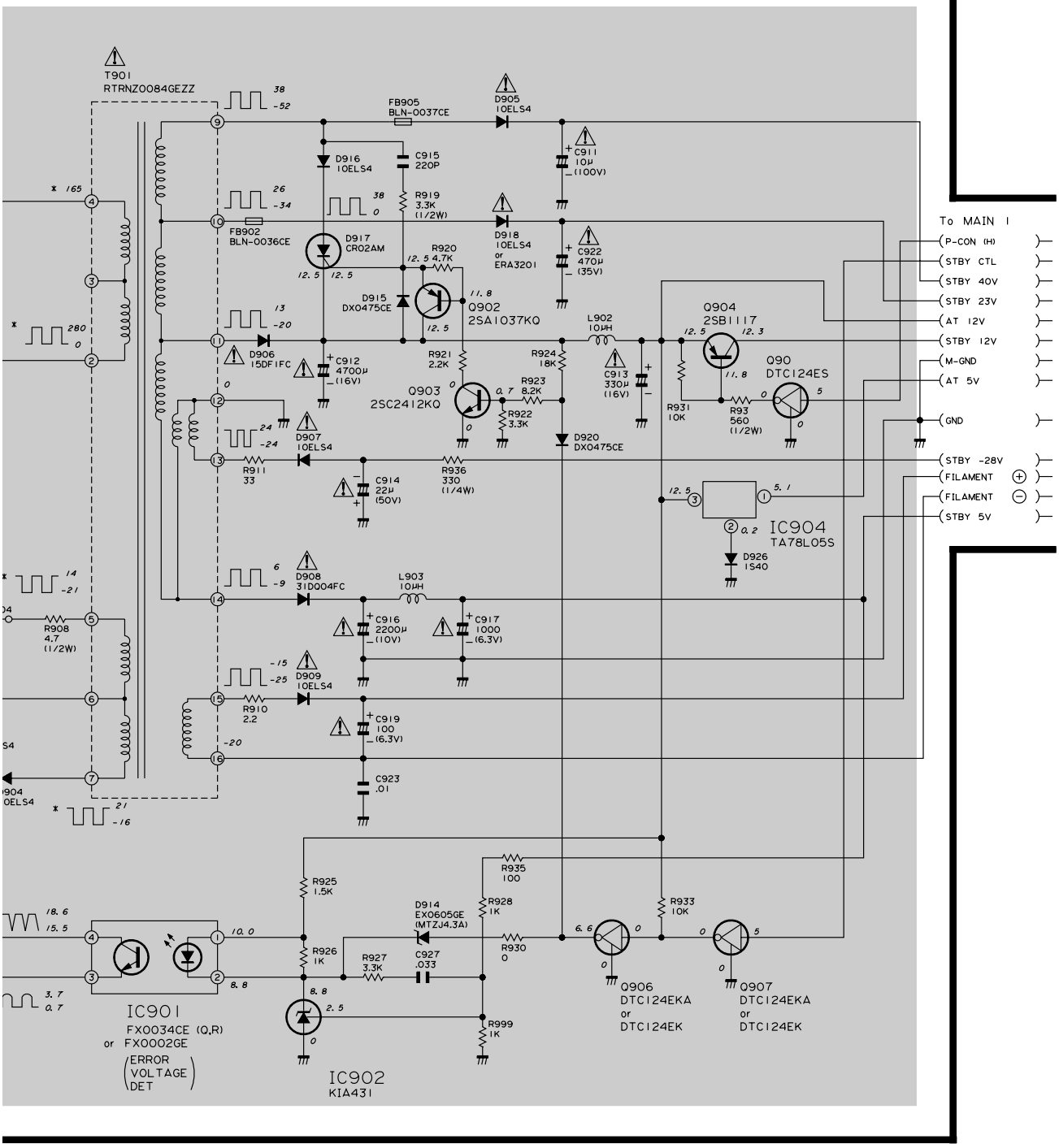


MAIN CIRCUIT (3)



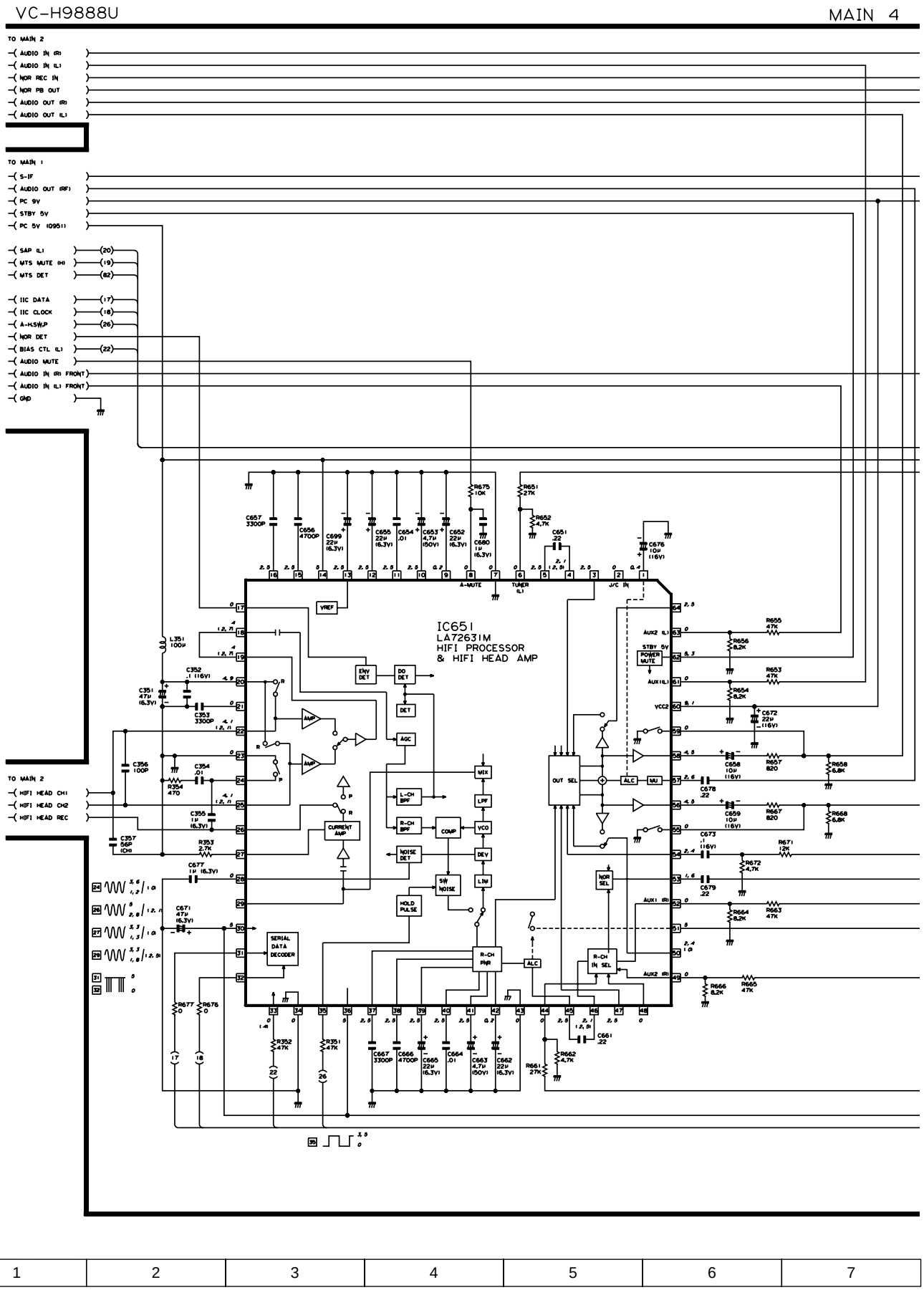
*** VOLTAGE MEASUREMENT MODE**
PB Parentheses ( )
REC Without Parentheses

MAIN 3 (POWER) DUNTK5610TE



7	8	9	10	11	12	13

MAIN CIRCUIT (4)

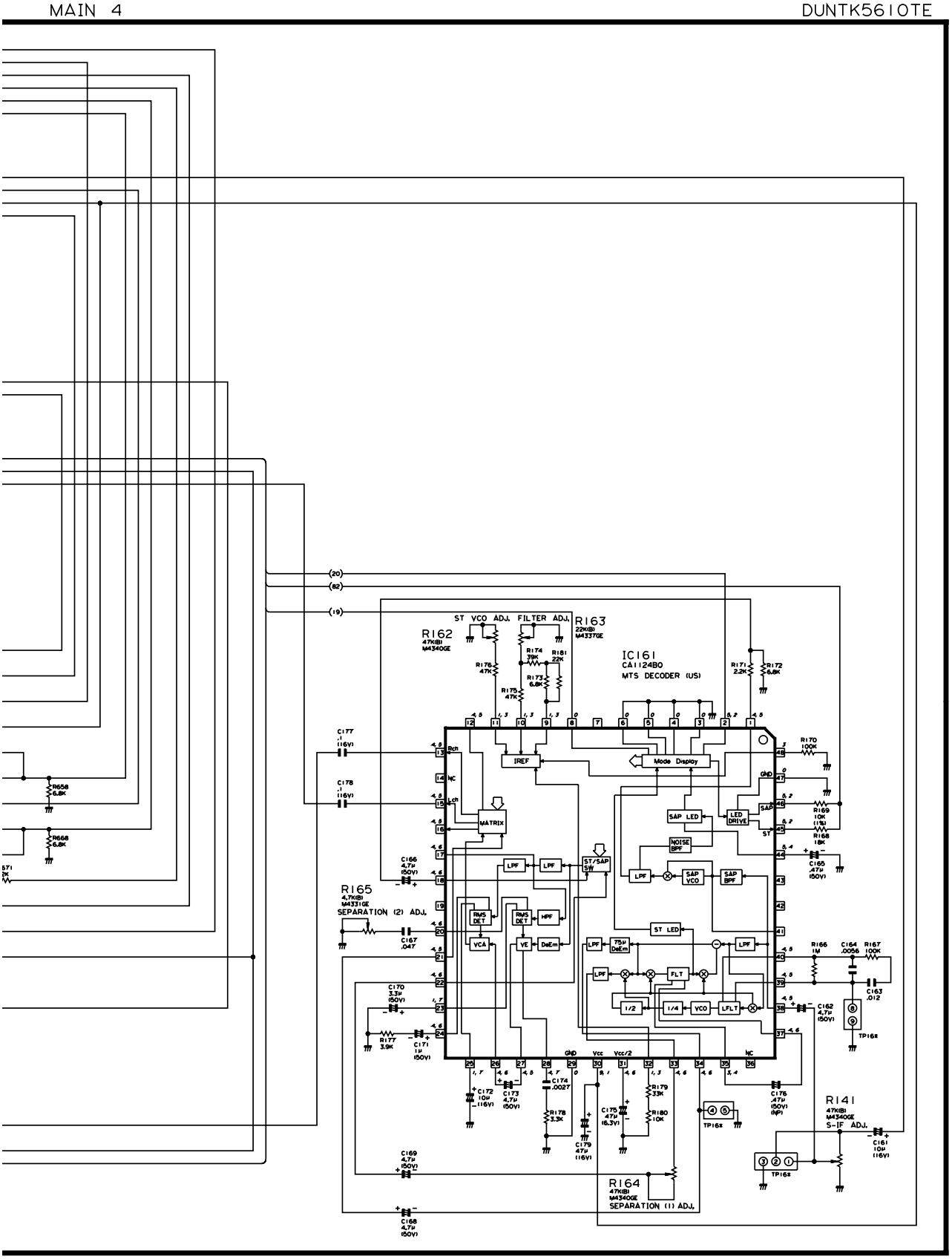


*** VOLTAGE MEASUREMENT MODE**

PB Parentheses ( )

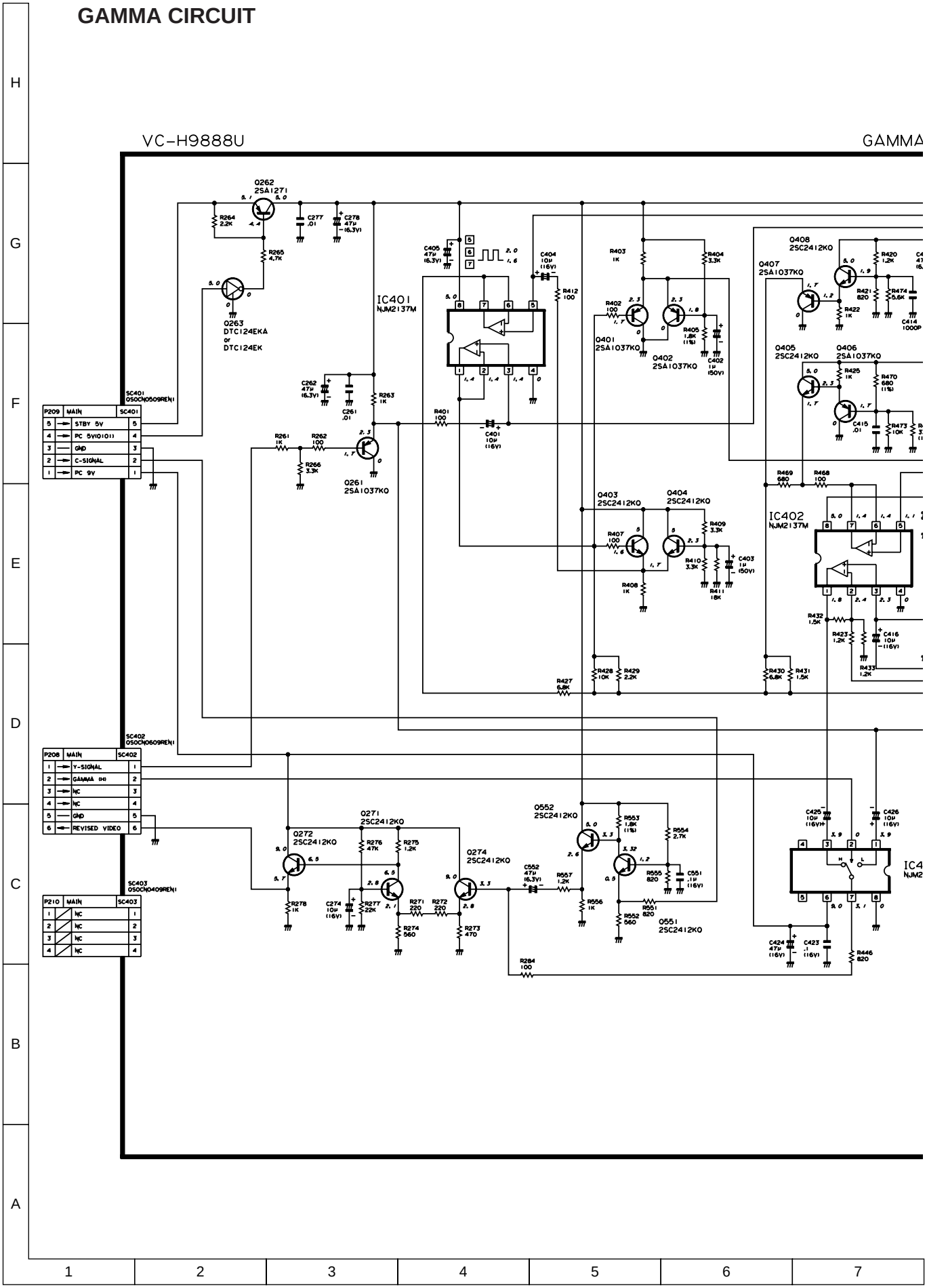
REC Without Parentheses

MAIN 4 DUNTK561OTE



7	8	9	10	11	12	13

GAMMA CIRCUIT

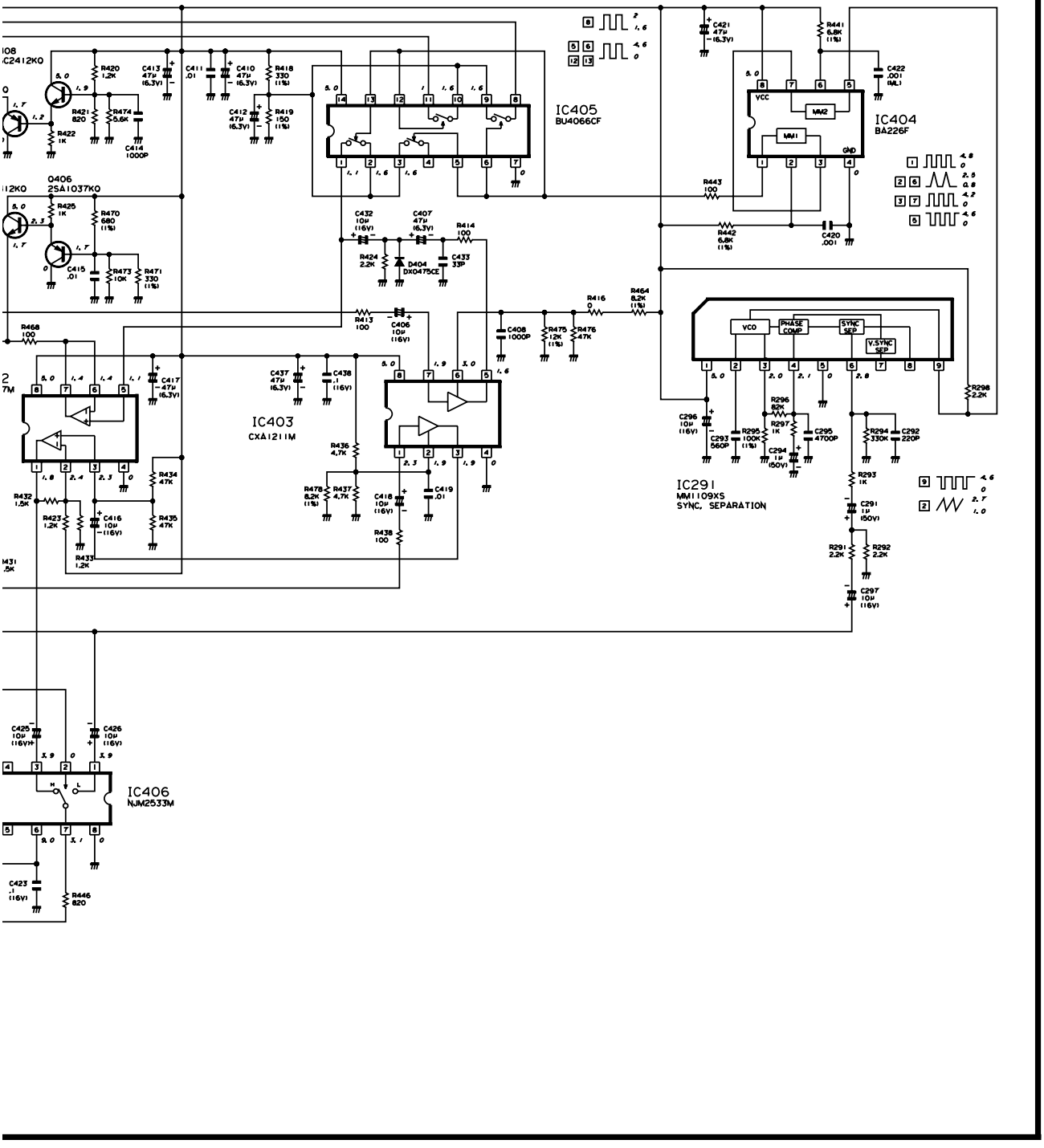


*** VOLTAGE MEASUREMENT MODE**

PB Parentheses ( )

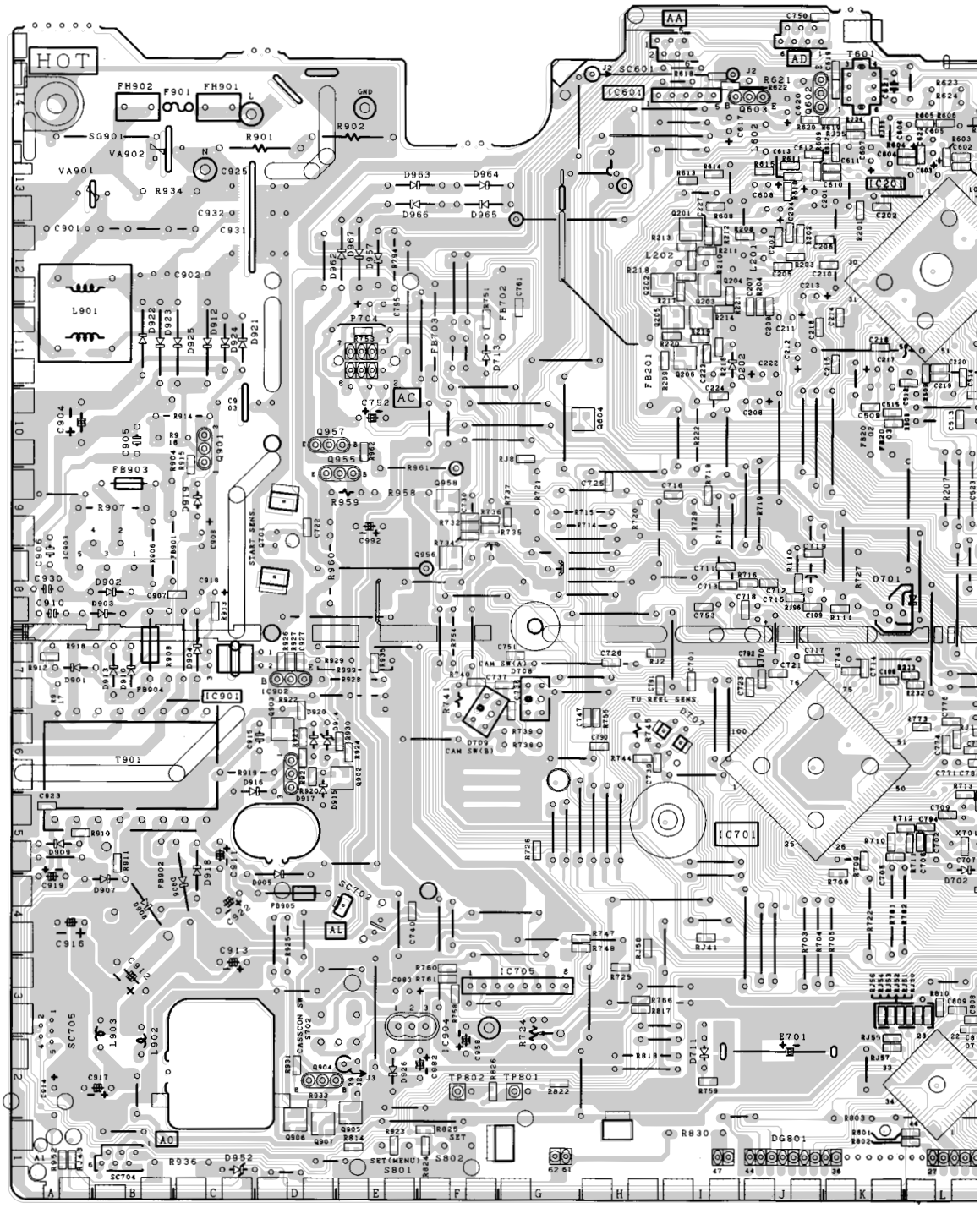
REC Without Parentheses

GAMMA DUNTK5613TE



7	8	9	10	11	12	13

MAIN PWB


HOT
IC601
IC201
IC701
IC901
IC705
T601
T901
L901
L902
L202
L203
TP802
TP801
S801
S802
E701
DG801
SC601
SC704
SC705
SC702
FH902
F901
FH901
SG901
VA902
VA901
R901
R902
R934
C925
C932
C931
C901
C902
D963
D964
D966
D965
P704
C752
Q957
Q955
Q956
Q958
R959
R961
FB903
R907
C904
C905
C906
C930
C910
D902
D903
C907
C908
C909
C992
START SENS
CAM SW(A)
CAM SW(B)
TU REEL SENS
CASSCON SW
SET
SET(MENU)
C916
C913
C912
C917
C923
C915
C914
C911
C918
C919
C921
C922
C924
C925
C926
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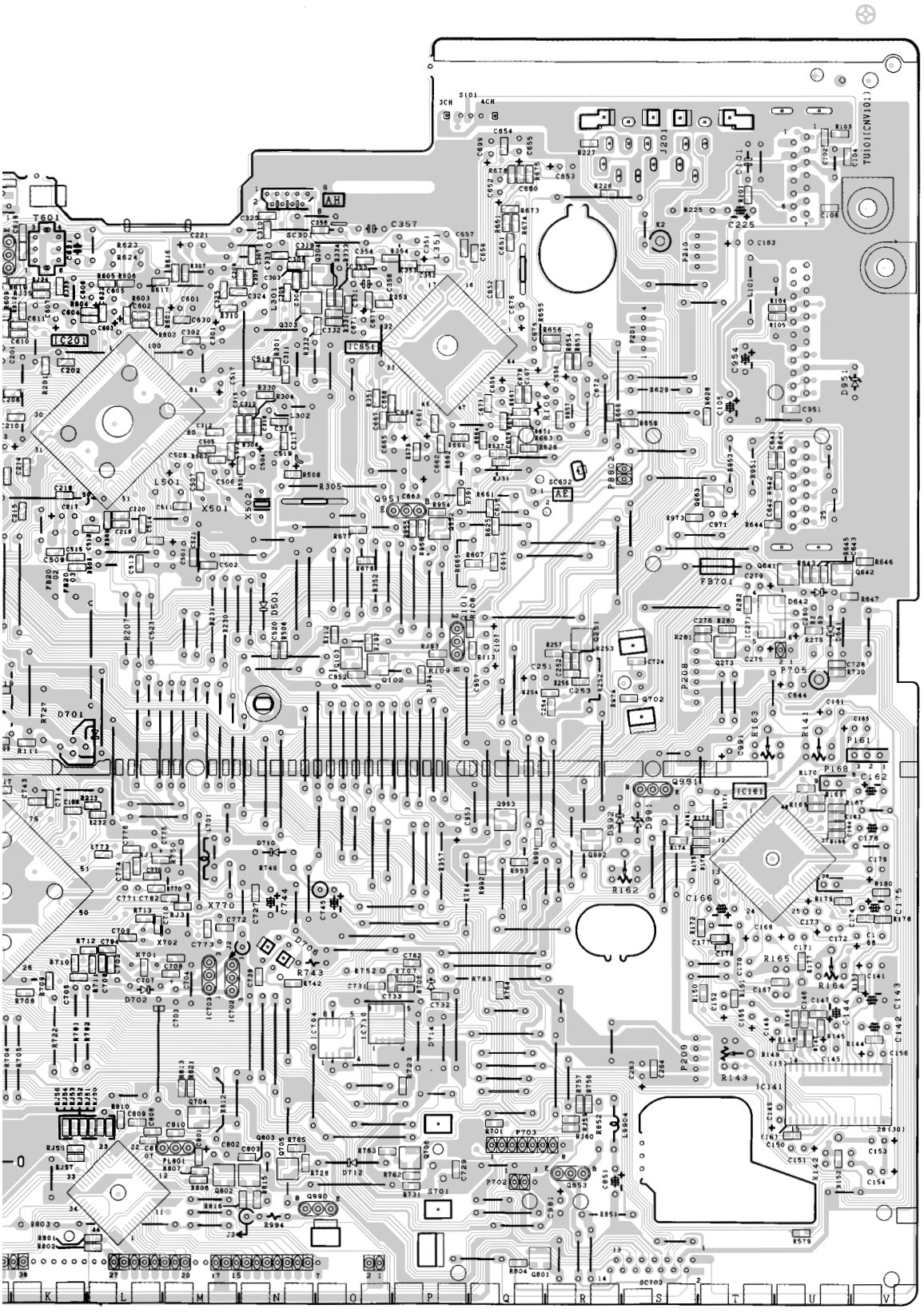
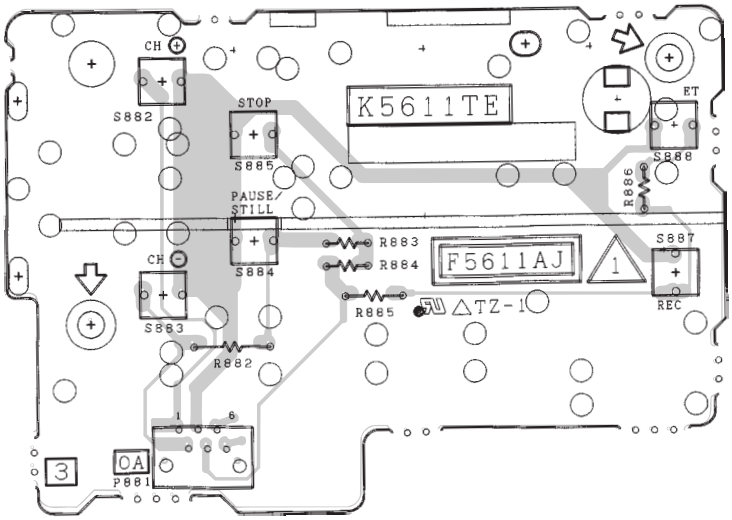
C968
C969
C970

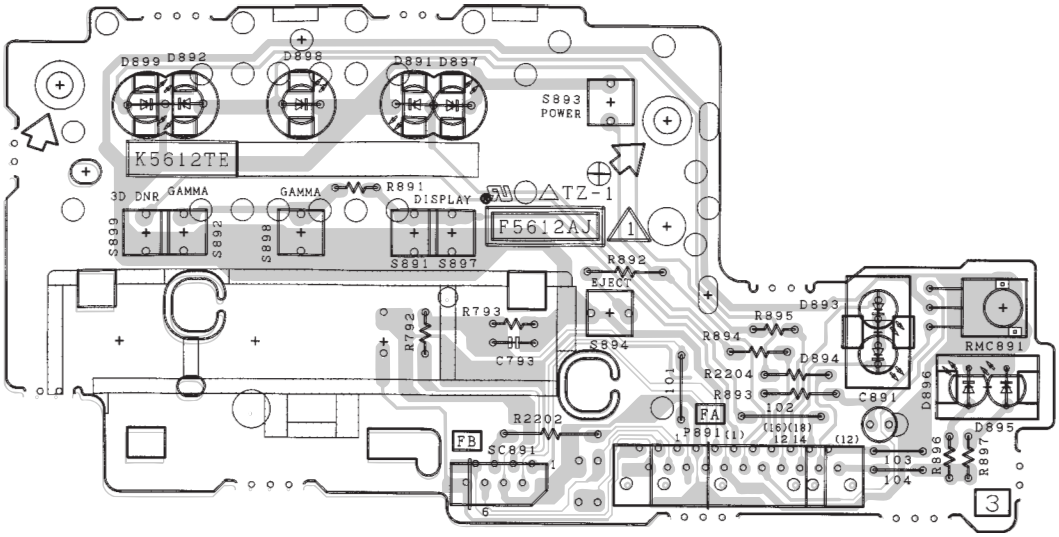


7	8	9	10	11	12	13

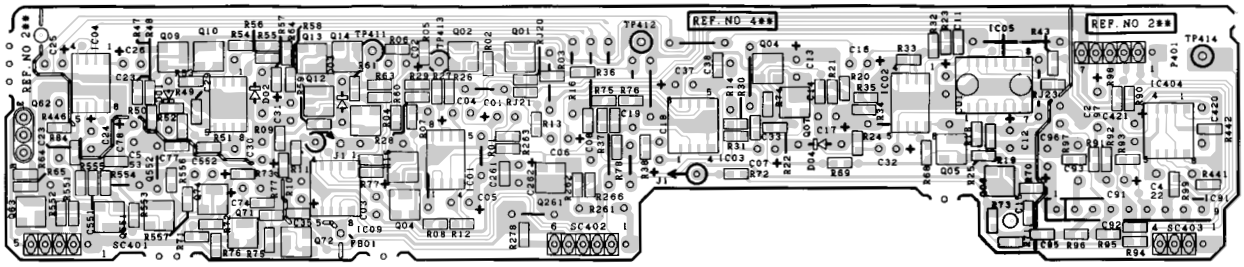
OPERATION PWB



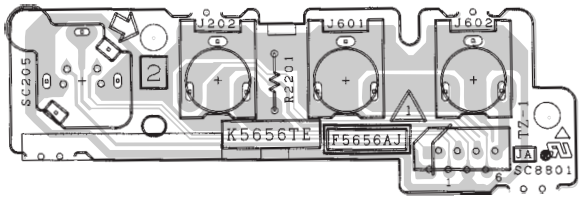
FRONT AV PWB



GAMMA PWB



FRONT AV JACK PWB



7.PARTS LIST
PARTS REPLACEMENT

Many electrical and mechanial parts in video cassette recorder have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by " ⚠ " and shaded areas in the Replacement Parts Lists and Schematic Diagrams.
The use of a substitute replacement part which does not have the same safety characteristics as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER **2. REF. NO.**
3. PART NO. **4. DESCRIPTION**

LISTE DES PIECES
CHANGE DES PIECES

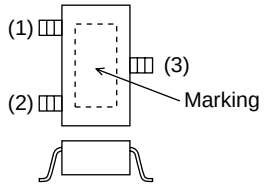
De nombereuses pièces électriques et mécaniques de magnétoscopes présentent des caractéristiques particulières de sécurité.
Ces caractéristiques ne sont pas toujours évidentes à l'inspection visuelle at la protection qu'elles assurent ne peut pas toujours être obtenue par des pièces de rechange étalonnées à un régime de tension, une puissance, etc. superieurs. Les pièces de rechange qui présentent ces caractéristiques spéciales de sécuité, sont identifiées dans ce manuel: les pièces électriques qui présentent ces particularités, sont repérée par la marque " ⚠ " et sont hachurées dans les listes de piéces et dans les diagrammes schématiques.
La substitution d'une pièce de rechange par une autre qui ne présente pas les mêmes caractéristiques de sécurité que la pièce recommandée par l'usine et repérée dans ce manuel de service, peut provoquer une électrocution, un incendie ou tout autre sinstre.

"COMMENT COMMANDER LES PIECES DE RECHANGE"

Pour que votre commande soit rapidement et correctement remplie, veuillez fournir les renseignements suivaints.

1.NUMERO DU MODELE **2.NO. DEREF**
3.NO. DE PIECE **4.DESCRIPTION**

HOW TO IDENTIFY CHIP TRANSISTORS AND DIODES BY ITS MARKING



(1) Base/Input
(2) Emitter/Ground
(3) Collector/Output

Fig. 1

Package	Marking	Parts No.
Fig. 1	FQ	VS2SA1037KQ-1
Fig. 1	BQ	VS2SC2412KQ-1
Fig. 1	16	VSDTA144EK/-1
Fig. 1	15	VSDTA124EK/-1
Fig. 1	25	VSDTC124EK/-1

MARK ★: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code

PRINTED WIRING BOARD ASSEMBLIES
(NOT REPLACEMENT ITEM)

DUNTK5610TEV2	-	Main UNIT	—
DUNTK5611TEV2	-	Operation UNIT	—
DUNTK5612TEV3	-	Front AV UNIT	—
DUNTK5613TEV2	-	GAMMA UNIT	—
DUNTK5656TEV2	-	Front AV Jack UNIT	—

★ MARQUE: SECTION LIVRAISON DES PIECES DE RECHANGE

Ref. No.	Part No.	★	Description	Code

DUNTK5610TEV2
Main Unit

TUNER

NOTE: ***THE PARTS HERE SHOWN ARE SUPPLIED AS AN*** *ASSEMBLY BUT NOT INDEPENDENTLY.*

	TU101	VTUENG56701-1	V	VHF TUNER	BL

INTEGRATED CIRCUITS

	IC161	VHiCA1124BQ-1	V	CXA1124BQ	AY
	IC201	VHiHA8311AF-1	V	I.C.	AY
	IC601	VHiBA7755A/-1	V	I.C.	AE
	IC651	VHiLA72631M-1	V	I.C.	AU
	IC701	RH-iX1161GEZZ	V	I.C.	BE
	IC702	VHiPST600H/-1	V	IC-PST600H-2	AE
	IC705	VHiBA6955N/-1	V	BA6955N	AF
	IC710	VHiS24C02A/-1	V	S-24C02AFJ-TB	AK
	IC801	VHiMN12510F-1	V	MN12510F	AM
⚠	IC902	VHiKiA431//-1	V	KIA431	AE
⚠	IC903	VHiSTRF6632-1	V	STR-F6632	AN
⚠	IC904	VHiTA7805S/-1	V	TA7805S	AD

TRANSISTORS

⚠	Q90	VSDTC124ES/-1	V	DTC124ES	AB
	Q101	VS2SA1271-Y-1	V	2SA1271-Y	AB
	Q102	VSDTC124EKA-1	V	DTC124EKA	AB
	Q201	VS2SC2412KQ-1	V	2SC2412KQ	AA
	Q202	VS2SC2412KQ-1	V	2SC2412KQ	AA
	Q203	VS2SC2412KQ-1	V	2SC2412KQ	AA
	Q204	VS2SA1037KQ-1	V	2SA1037KQ	AA
	Q205	VS2SA1037KQ-1	V	2SA1037KQ	AA
	Q206	VSDTC124EKA-1	V	DTC124EKA	AB
	Q251	VS2SA1037KQ-1	V	2SA1037KQ	AA
	Q273	VS2SC2412KQ-1	V	2SC2412KQ	AA
	Q303	VS2SD1306-E1E	V	2SD1306-E	AD
	Q304	VS2SD1306-E1E	V	2SD1306-E	AD
	Q602	VS2C3939SQR-1	V	2C3939SQR	AC

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Ref. No.	Part No.	★	Description	Code
Q603	VS2SC3203Y/-1	V	2SC3203Y	AB
Q604	VSDTA114EKA-1	V	DTA114EKA	AB
Q704	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q705	VSDTC114EKA-1	V	DTC114EKA	AB
Q706	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q801	VSDTA124EKA-1	V	DTA124EKA	AB
Q853	VS2SD468-AC-1	V	2SD468-AC	AC
⚠ Q902	VS2SA1037KQ-1	V	2SA1037KQ	AA
⚠ Q903	VS2SC2412KQ-1	V	2SC2412KQ	AA
⚠ Q904	VS2SB1117KU1E	V	2SB1117KU	AE
⚠ Q906	VSDTC124EKA-1	V	DTC124EKA	AB
⚠ Q907	VSDTC124EKA-1	V	DTC124EKA	AB
Q951	VS2SA1271-Y-1	V	2SA1271-Y	AB
Q952	VSDTC124EKA-1	V	DTC124EKA	AB
Q955	VS2SB1117KU1E	V	2SB1117KU	AE
Q956	VSDTC124EKA-1	V	DTC124EKA	AB
Q957	VS2SB1117KU1E	V	2SB1117KU	AE
Q958	VSDTC124EKA-1	V	DTC124EKA	AB
Q963	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q991	VS2SC3203Y/-1	V	2SC3203Y	AB
Q992	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q993	VSDTC124EKA-1	V	DTC124EKA	AB
DIODES				
DG801	VVK20U2610B-1	V	Display	AY
D202	RH-DX0475CEZZ	V	Diode	AB
D701	RH-PX0270GEZZ	V	Photo Diode	AC
D702	RH-DX0475CEZZ	V	Diode	AB
D706	RH-PX0252GEZZ	V	GP1S563	AF
D707	RH-PX0252GEZZ	V	GP1S563	AF
D708	RH-PX0253GEZZ	V	GP1S94	AF
D709	RH-PX0253GEZZ	V	GP1S94	AF
D712	RH-DX0475CEZZ	V	Diode	AB
D713	RH-DX0475CEZZ	V	Diode	AB
D714	RH-DX0475CEZZ	V	Diode	AB
⚠ D901	VHD10ELS4//-1	V	10ELS4	AD
⚠ D903	RH-DX0475CEZZ	V	Diode	AB
⚠ D904	VHD10ELS4//-1	V	10ELS4	AD
⚠ D905	VHD10ELS4//-1	V	10ELS4	AD
⚠ D906	VHD15DF1FC/1E	V	15DF1FC	AD
⚠ D907	VHD10ELS4//-1	V	10ELS4	AD
⚠ D908	VHD31DQ04FC1E	V	31DQ04FC	AC
⚠ D909	VHD10ELS4//-1	V	10ELS4	AD
⚠ D910	VHD10ELS4//-1	V	10ELS4	AD
⚠ D912	VHDRL1N4004-1	V	RL1N4004	AD
⚠ D913	VHD10ELS4//-1	V	10ELS4	AD
⚠ D914	RH-EX0605GEZZ	V	Zener Diode	AA
⚠ D915	RH-DX0475CEZZ	V	Diode	AB
⚠ D916	VHD10ELS4//-1	V	10ELS4	AD
⚠ D917	VHDCR02AM//-1	V	CR02AM	AE
⚠ D918	VHD10ELS4//-1	V	10ELS4	AD
⚠ D920	RH-DX0475CEZZ	V	Diode	AB
⚠ D921	VHDRL1N4004-1	V	RL1N4004	AD
⚠ D922	VHDRL1N4004-1	V	RL1N4004	AD
⚠ D923	VHDRL1N4004-1	V	RL1N4004	AD
⚠ D924	VHDRL1N4004-1	V	RL1N4004	AD
⚠ D926	VHD1S40////-1	V	1S40	AF
D951	RH-EX0677GEZZ	V	Zener Diode	AB
D952	RH-EX0601GEZZ	V	Zener Diode	AA
D957	VHD1S40////-1	V	1S40	AF
D962	VHDRL1N4004-1	V	RL1N4004	AD
D963	VHDRL1N4004-1	V	RL1N4004	AD
D964	VHDRL1N4004-1	V	RL1N4004	AD
D965	VHDRL1N4004-1	V	RL1N4004	AD
D966	VHDRL1N4004-1	V	RL1N4004	AD
D967	VHDRL1N4004-1	V	RL1N4004	AD
D991	RH-EX0631GEZZ	V	Zener Diode	AA
D992	RH-DX0475CEZZ	V	Diode	AB
⚠ IC901	RH-FX0034CEZZ	V	PC817	AE
Q701	RH-PX0233GEZZ	V	PT493FL2	AD
Q702	RH-PX0233GEZZ	V	PT493FL2	AD
PACKAGED CIRCUITS				
X501	RCRSB0204GEZZ	V	Crystal	AG
X701	RCRSB0156GEZZ	V	Crystal	AF
X702	RCRSB0138GEZZ	V	Crystal	AD
COILS AND TRANSFORMERS				
FL801	RFiLC0091GEZZ	V	Filter	AD
L101	VP-CF101K0000	V	100µH	AB
L201	VP-XF820K0000	V	82µH	AB
L202	VP-XF101K0000	V	100µH	AB
L301	VP-MK101K0000	V	100µH	AB
L351	VP-MK101K0000	V	100µH	AB
L501	VP-XF120K0000	V	12µH	AB
L602	VP-DF221K0000	V	220µH	AB
⚠ L901	RCiLF0002AJZZ	V	Coil	AK
⚠ L902	RCiLP0161CEZZ	V	Coil	AD
⚠ L903	RCiLP0161CEZZ	V	Coil	AD
L9904	VP-DF221K0000	V	220µH	AB
T601	RTRNH0086GEZZ	J	OSC. Transformer	AD
⚠ T901	RTRNZ0084GEZZ	J	Transformer	AM
CONTROLS				
R141	RVR-M4340GEZZ	V	47k(B), S-IF	AB
R162	RVR-M4340GEZZ	V	47k(B)	AB
R163	RVR-M4337GEZZ	V	22k(B)	AB
R164	RVR-M4340GEZZ	V	47k(B), Separtation (1)	AB
R165	RVR-M4331GEZZ	V	4.7k(B), Separation (2)	AC
CAPACITORS				
C101	VCKYD41HB101K	V	100p 50V Ceramic	AA
C103	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C105	VCEAGA0JW108M	V	1000 6.3V Electrolytic	AC
C106	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C108	VCCCCY1HH470J	V	47p 50V Ceramic	AA
C109	VCCCCY1HH470J	V	47p 50V Ceramic	AA
C161	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C162	VCEA9A1HW475M	V	4.7 50V Electrolytic	AB
C163	VCKYCY1EB123K	V	0.012 25V Ceramic	AA
C164	VCKYCY1HB562K	V	5600p 50V Ceramic	AA
C165	VCEA9M1HW474M	V	0.47 50V Electrolytic	AB
C166	VCEA9A1HW475M	V	4.7 50V Electrolytic	AB
C167	VCKYCY1CB473K	V	0.047 16V Ceramic	AA
C168	VCEA9A1HW475M	V	4.7 50V Electrolytic	AB
C169	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB
C170	VCEA9M1HW335M	V	3.3 50V Electrolytic	AB
C171	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C172	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C173	VCEA9M1HW475M	V	4.7 50V Electrolytic	AB
C174	VCKYCY1HB272K	V	2700p 50V Ceramic	AA
C175	VCEA9A0JW476M	V	47 6.3V Electrolytic	AB
C176	VCE9EA1HW474M	V	0.47 50V Elect.(N.P)	AB
C177	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA
C178	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA
C179	VCEA9M1CW476M	V	47 16V Electrolytic	AB
C201	VCEA9M0JW107M	V	100 6.3V Electrolytic	AB
C202	VCKYCY0JF105Z	V	1 6.3V Ceramic	AB
C203	VCCCCY1HH151J	V	150p 50V Ceramic	AA
C204	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA

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Ref. No.	Part No.	★			Description	Code
C205	VCCCCY1HH470J	V	47p	50V	Ceramic	AA
C206	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C207	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C208	VCEA9M1CW106M	V	10	16V	Electrolytic	AB
C209	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C210	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C211	VCEA9M1HW335M	V	3.3	50V	Electrolytic	AB
C212	VCEA9M1CW106M	V	10	16V	Electrolytic	AB
C213	VCEA9M1HW225M	V	2.2	50V	Electrolytic	AB
C214	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C215	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C216	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C217	VCEA9M0JW107M	V	100	6.3V	Electrolytic	AB
C218	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C219	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C220	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C221	VCEA9M1CW106M	V	10	16V	Electrolytic	AB
C222	VCEA9M0JW107M	V	100	6.3V	Electrolytic	AB
C223	VCKYCY1CF474Z	V	0.47	16V	Ceramic	AB
C225	VCEAGA0JW337M	V	330	6.3V	Electrolytic	AB
C251	VCEA9M1CW476M	V	47	16V	Electrolytic	AB
C263	VCEA9M0JW107M	V	100	6.3V	Electrolytic	AB
C264	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C275	VCEA9M1CW106M	V	10	16V	Electrolytic	AB
C276	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C301	VCEA9M0JW476M	V	47	6.3V	Electrolytic	AB
C302	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C303	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C304	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C305	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C306	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C307	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C308	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C309	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C310	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C311	VCKYCY1EB103K	V	0.01	25V	Ceramic	AA
C312	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C319	VCCCCY1HH150J	V	15p	50V	Ceramic	AA
C320	VCCCCY1HH150J	V	15p	50V	Ceramic	AA
C331	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C332	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C333	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C351	VCEA9M0JW476M	V	47	6.3V	Electrolytic	AB
C352	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C353	VCKYCY1HB332K	V	3300p	50V	Ceramic	AA
C354	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C355	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C356	VCCCCY1HH101J	V	100p	50V	Ceramic	AA
C357	VCCCPA1HH560J	V	56p	50V	Ceramic	AA
C501	VCEA9M0JW107M	V	100	6.3V	Electrolytic	AB
C502	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C503	VCKYCY1HB472K	V	4700p	50V	Ceramic	AA
C504	VCEA9M1HW225M	V	2.2	50V	Electrolytic	AB
C505	VCKYCY1HF223Z	V	0.022	50V	Ceramic	AB
C506	VCEA9M1HW474M	V	0.47	50V	Electrolytic	AB
C507	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C508	VCEA9M1HW475M	V	4.7	50V	Electrolytic	AB
C509	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C511	VCCCCY1HH5R0C	V	5.0p	50V	Ceramic	AA
C512	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C513	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C515	VCKYCY1HB331K	V	330p	50V	Ceramic	AA
C517	VCEA9M1HW335M	V	3.3	50V	Electrolytic	AB
C518	VCKYCY1HF333Z	V	0.033	50V	Ceramic	AA
C521	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C522	VCKYD41CY103N	V	0.01	16V	Ceramic	AA
C523	VCKYD41CY103N	V	0.01	16V	Ceramic	AA
C601	VCEA9M0JW107M	V	100	6.3V	Electrolytic	AB
C602	VCKYCY1EB103K	V	0.01	25V	Ceramic	AA
C603	VCEA9A0JW226M	V	22	6.3V	Electrolytic	AB
C604	VCKYCY1HB821K	V	820p	50V	Ceramic	AA
C605	VCEA9M1CW106M	V	10	16V	Electrolytic	AB
C606	VCEA9M1HW475M	V	4.7	50V	Electrolytic	AB
C607	VCEA9M1HW475M	V	4.7	50V	Electrolytic	AB
C608	VCEA9M0JW226M	V	22	6.3V	Electrolytic	AB
C609	VCEA9M1HW475M	V	4.7	50V	Electrolytic	AB
C611	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C616	VCKYCY1HB222K	V	2200p	50V	Ceramic	AA
C617	VCEA9M1CW476M	V	47	16V	Electrolytic	AB
C618	VCKYCY1EB103K	V	0.01	25V	Ceramic	AA
C619	VCKYCY1EB103K	V	0.01	25V	Ceramic	AA
C620	VCEA9M1CW106M	V	10	16V	Electrolytic	AB
C621	VCQPYA2AA562J	V	5600p	100V	Mylar	AC
C622	VCKYCY1HB222K	V	2200p	50V	Ceramic	AA
C630	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C651	VCKYCY1CF224Z	V	0.22	16V	Ceramic	AA
C652	VCEA9M0JW226M	V	22	6.3V	Electrolytic	AB
C653	VCEA9M1HW475M	V	4.7	50V	Electrolytic	AB
C654	VCKYCY1EB103K	V	0.01	25V	Ceramic	AA
C655	VCEA9M0JW226M	V	22	6.3V	Electrolytic	AB
C656	VCKYCY1HB472K	V	4700p	50V	Ceramic	AA
C657	VCKYCY1HB332K	V	3300p	50V	Ceramic	AA
C658	VCEA9M1CW106M	V	10	16V	Electrolytic	AB
C659	VCEA9M1CW106M	V	10	16V	Electrolytic	AB
C661	VCKYCY1CF224Z	V	0.22	16V	Ceramic	AA
C662	VCEA9M0JW226M	V	22	6.3V	Electrolytic	AB
C663	VCEA9M1HW475M	V	4.7	50V	Electrolytic	AB
C664	VCKYCY1EB103K	V	0.01	25V	Ceramic	AA
C665	VCEA9M0JW226M	V	22	6.3V	Electrolytic	AB
C666	VCKYCY1HB472K	V	4700p	50V	Ceramic	AA
C667	VCKYCY1HB332K	V	3300p	50V	Ceramic	AA
C671	VCEA9M0JW476M	V	47	6.3V	Electrolytic	AB
C672	VCEA9M1CW226M	V	22	16V	Electrolytic	AB
C673	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C676	VCEA9M1CW106M	V	10	16V	Electrolytic	AB
C677	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C678	VCKYCY1CF224Z	V	0.22	16V	Ceramic	AA
C679	VCKYCY1CF224Z	V	0.22	16V	Ceramic	AA
C680	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C699	VCEA9M0JW226M	V	22	6.3V	Electrolytic	AB
C701	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C702	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C703	VCEA9M1HW105M	V	1	50V	Electrolytic	AB
C704	VCKYCY0JF105Z	V	1	6.3V	Ceramic	AB
C705	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C706	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C707	VCCCCY1HH220J	V	22p	50V	Ceramic	AA
C708	VCCCCY1HH220J	V	22p	50V	Ceramic	AA
C709	VCCCCY1HH180J	V	18p	50V	Ceramic	AA
C710	VCCCCY1HH220J	V	22p	50V	Ceramic	AA
C711	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C712	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C713	VCKYCY1HB102K	V	1000p	50V	Ceramic	AA
C714	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C715	VCEA9M0JW226M	V	22	6.3V	Electrolytic	AB
C717	VCKYCY1HB221K	V	220p	50V	Ceramic	AA
C718	VCKYCY1CF104Z	V	0.1	16V	Ceramic	AA
C719	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C722	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA
C724	VCKYCY1HF103Z	V	0.01	50V	Ceramic	AA

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	C726	VCKYCY1HF103Z	V	0.01	50V	Ceramic		AA
	C727	VCKYCY1CF224Z	V	0.22	16V	Ceramic		AA
	C729	VCKYCY1HF103Z	V	0.01	50V	Ceramic		AA
	C730	VCKYCY1HF103Z	V	0.01	50V	Ceramic		AA
	C738	VCKYCY1HB102K	V	1000p	50V	Ceramic		AA
	C739	VCKYCY1HB102K	V	1000p	50V	Ceramic		AA
	C740	VCKYCY1CF104Z	V	0.1	16V	Ceramic		AA
	C743	VCKYCY1CF224Z	V	0.22	16V	Ceramic		AA
	C744	VCEA2A0JW108M	V	1000	6.3V	Electrolytic		AB
	C745	VCEA2A0JW108M	V	1000	6.3V	Electrolytic		AB
	C750	VCKYCY0JF105Z	V	1	6.3V	Ceramic		AB
	C752	VCEA2A1EW107M	V	100	25V	Electrolytic		AB
	C761	VCKYCY0JF105Z	V	1	6.3V	Ceramic		AB
	C762	VCKYCY0JF105Z	V	1	6.3V	Ceramic		AB
	C770	VCCCCY1HH101J	V	100p	50V	Ceramic		AA
	C771	VCE9EM1HW105M	V	1	50V	Elect.(N.P)		AB
	C774	VCKYCY0JF105Z	V	1	6.3V	Ceramic		AB
	C775	VCEA9M0JW476M	V	47	6.3V	Electrolytic		AB
	C776	VCKYCY0JF105Z	V	1	6.3V	Ceramic		AB
	C782	VCCCCY1HH330J	V	33p	50V	Ceramic		AA
	C790	VCKYCY1HB102K	V	1000p	50V	Ceramic		AA
	C791	VCKYCY1HB102K	V	1000p	50V	Ceramic		AA
	C792	VCKYCY1HB102K	V	1000p	50V	Ceramic		AA
	C794	VCKYCY0JF105Z	V	1	6.3V	Ceramic		AB
	C795	VCEA9M0JW476M	V	47	6.3V	Electrolytic		AB
	C801	VCKYCY1HF103Z	V	0.01	50V	Ceramic		AA
	C802	VCEA9M0JW226M	V	22	6.3V	Electrolytic		AB
	C851	VCEAGA1CW227M	V	220	16V	Electrolytic		AC
⚠	C901	RC-FZ023CUMZZ	V	0.1	AC250V	M.Polypro		AF
⚠	C903	RC-KZ0147GEZZ	V	3300p	AC125V	Ceramic		AC
⚠	C904	RC-EZ0238CEZZ	V	82	200V	Electrolytic		AE
⚠	C907	VCCCCY1HH471J	V	470p	50V	Ceramic		AA
⚠	C908	VCEAEM1EW226M	V	22	25V	Electrolytic		AB
⚠	C910	VCQYTA1HM222J	V	2200p	50V	Mylar		AA
⚠	C911	VCEAGA2AW106M	V	10	100V	Electrolytic		AC
⚠	C912	VCEA0H1CW478M	V	4700	16V	Electrolytic		AF
⚠	C913	VCEAGA1CW337M	V	330	16V	Electrolytic		AC
⚠	C914	VCEAGA1HW226M	V	22	50V	Electrolytic		AB
⚠	C915	VCKYPA2HB221K	V	220p	500V	Ceramic		AA
⚠	C916	RC-EZ0438GEZZ	V	2200	10V	Electrolytic		AF
⚠	C917	VCEAGA0JW108M	V	1000	6.3V	Electrolytic		AC
⚠	C918	VCEAEM1HW475M	V	4.7	50V	Electrolytic		AB
⚠	C919	VCEAGA0JW107M	V	100	6.3V	Electrolytic		AB
⚠	C922	VCEAGA1VW477M	V	470	35V	Electrolytic		AD
⚠	C923	VCKYCY1HF103Z	V	0.01	50V	Ceramic		AA
⚠	C927	VCKYCY1CB333K	V	0.033	16V	Ceramic		AA
⚠	C930	RC-KZ0365CEZZ	V	1000p	50V	Ceramic		AD
	C951	VCKYCY1HF333Z	V	0.033	50V	Ceramic		AA
	C953	VCEA9M1HW475M	V	4.7	50V	Electrolytic		AB
	C954	VCEA9A1HW105M	V	1	50V	Electrolytic		AB
	C957	VCEA9M0JW476M	V	47	6.3V	Electrolytic		AB
	C958	VCEA9A0JW476M	V	47	6.3V	Electrolytic		AB
	C971	VCEA9M0JW226M	V	22	6.3V	Electrolytic		AB
	C981	VCEA9M1CW476M	V	47	16V	Electrolytic		AB
	C982	VCEA9A0JW476M	V	47	6.3V	Electrolytic		AB
	C983	VCEA9M1CW476M	V	47	16V	Electrolytic		AB
	C991	VCEA9M1CW476M	V	47	16V	Electrolytic		AB
	C992	VCEA2A0JW108M	V	1000	6.3V	Electrolytic		AB

RESISTORS

⚠	R93	VRD-RM2HD561J	V	560	1/2W	Carbon		AA
	R101	VRS-CY1JF470J	V	47	1/16W	Metal Oxide		AA
	R103	VRS-CY1JF473J	V	47k	1/16W	Metal Oxide		AA
	R107	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide		AA
	R108	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide		AA
	R109	VRS-CY1JF561J	V	560	1/16W	Metal Oxide		AA
	R110	VRS-CY1JF153J	V	15k	1/16W	Metal Oxide		AA
	R111	VRS-CY1JF153J	V	15k	1/16W	Metal Oxide		AA
	R166	VRS-CY1JF105J	V	1M	1/16W	Metal Oxide		AA
	R167	VRS-CY1JF104J	V	100k	1/16W	Metal Oxide		AA
	R168	VRS-CY1JF183J	V	18k	1/16W	Metal Oxide		AA
	R169	VRS-CY1JF103F	V	10k	1/16W	Metal Oxide		AA
	R170	VRS-CY1JF104J	V	100k	1/16W	Metal Oxide		AA
	R171	VRS-CY1JF222J	V	2.2k	1/16W	Metal Oxide		AA
	R172	VRS-CY1JF682J	V	6.8k	1/16W	Metal Oxide		AA
	R173	VRS-CY1JF682J	V	6.8k	1/16W	Metal Oxide		AA
	R174	VRS-CY1JF393J	V	39k	1/16W	Metal Oxide		AA
	R175	VRS-CY1JF473J	V	47k	1/16W	Metal Oxide		AA
	R176	VRS-CY1JF473J	V	47k	1/16W	Metal Oxide		AA
	R177	VRS-CY1JF392J	V	3.9k	1/16W	Metal Oxide		AA
	R178	VRS-CY1JF332J	V	3.3k	1/16W	Metal Oxide		AA
	R179	VRS-CY1JF333J	V	33k	1/16W	Metal Oxide		AA
	R180	VRS-CY1JF103F	V	10k	1/16W	Metal Oxide		AA
	R181	VRS-CY1JF223J	V	22k	1/16W	Metal Oxide		AA
	R201	VRS-CY1JF682J	V	6.8k	1/16W	Metal Oxide		AA
	R202	VRS-CY1JF182J	V	1.8k	1/16W	Metal Oxide		AA
	R203	VRS-CY1JF562J	V	5.6k	1/16W	Metal Oxide		AA
	R207	VRD-RA2BE101J	V	100	1/8W	Carbon		AB
	R208	VRS-CY1JF272J	V	2.7k	1/16W	Metal Oxide		AA
	R209	VRS-CY1JF331F	V	330	1/16W	Metal Oxide		AA
	R210	VRS-CY1JF182J	V	1.8k	1/16W	Metal Oxide		AA
	R211	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide		AA
	R212	VRS-CY1JF681F	V	680	1/16W	Metal Oxide		AA
	R213	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide		AA
	R214	VRS-CY1JF104J	V	100k	1/16W	Metal Oxide		AA
	R216	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide		AA
	R217	VRS-CY1JF681F	V	680	1/16W	Metal Oxide		AA
	R218	VRS-CY1JF471J	V	470	1/16W	Metal Oxide		AA
	R219	VRS-CY1JF561J	V	560	1/16W	Metal Oxide		AA
	R220	VRS-CY1JF272J	V	2.7k	1/16W	Metal Oxide		AA
	R221	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide		AA
	R222	VRD-RA2BE102J	V	1k	1/8W	Carbon		AA
	R225	VRD-RA2BE750J	V	75	1/8W	Carbon		AA
	R226	VRS-CY1JF101J	V	100	1/16W	Metal Oxide		AA
	R227	VRS-CY1JF750J	V	75	1/16W	Metal Oxide		AA
	R232	VRS-CY1JF153J	V	15k	1/16W	Metal Oxide		AA
	R233	VRS-CY1JF153J	V	15k	1/16W	Metal Oxide		AA
	R252	VRD-RA2EE331J	V	330	1/4W	Carbon		AA
	R253	VRS-CY1JF101J	V	100	1/16W	Metal Oxide		AA
	R254	VRS-CY1JF101J	V	100	1/16W	Metal Oxide		AA
	R256	VRS-CY1JF183J	V	18k	1/16W	Metal Oxide		AA
	R279	VRS-CY1JF104J	V	100k	1/16W	Metal Oxide		AA
	R280	VRS-CY1JF563J	V	56k	1/16W	Metal Oxide		AA
	R281	VRS-CY1JF333J	V	33k	1/16W	Metal Oxide		AA
	R301	VRS-CY1JF473J	V	47k	1/16W	Metal Oxide		AA
	R330	VRS-CY1JF222J	V	2.2k	1/16W	Metal Oxide		AA
	R331	VRS-CY1JF152J	V	1.5k	1/16W	Metal Oxide		AA
	R332	VRS-CY1JF332J	V	3.3k	1/16W	Metal Oxide		AA
	R333	VRS-CY1JF152J	V	1.5k	1/16W	Metal Oxide		AA
	R334	VRS-CY1JF332J	V	3.3k	1/16W	Metal Oxide		AA
	R351	VRS-CY1JF473J	V	47k	1/16W	Metal Oxide		AA
	R352	VRD-RA2BE473J	V	47k	1/8W	Carbon		AA
	R353	VRS-CY1JF272J	V	2.7k	1/16W	Metal Oxide		AA
	R354	VRS-CY1JF471J	V	470	1/16W	Metal Oxide		AA
	R501	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide		AA
	R502	VRS-CY1JF273J	V	27k	1/16W	Metal Oxide		AA
	R510	VRS-CY1JF125J	V	1.2M	1/16W	Metal Oxide		AA
	R601	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide		AA
	R602	VRS-CY1JF274J	V	270k	1/16W	Metal Oxide		AA
	R603	VRS-CY1JF221J	V	220	1/16W	Metal Oxide		AA

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Main Unit (Continued)

Ref. No.	Part No.	★			Description	Code
R604	VRS-CY1JF473J	V	47k	1/16W	Metal Oxide	AA
R605	VRS-CY1JF153J	V	15k	1/16W	Metal Oxide	AA
R606	VRS-CY1JF273J	V	27k	1/16W	Metal Oxide	AA
R607	VRS-CY1JF561J	V	560	1/16W	Metal Oxide	AA
R608	VRS-CY1JF472J	V	4.7k	1/16W	Metal Oxide	AA
R611	VRS-CY1JF153J	V	15k	1/16W	Metal Oxide	AA
R612	VRS-CY1JF683J	V	68k	1/16W	Metal Oxide	AA
R617	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R618	VRS-CY1JF563J	V	56k	1/16W	Metal Oxide	AA
R619	VRS-CY1JF470J	V	47	1/16W	Metal Oxide	AA
R620	VRS-CY1JF153J	V	15k	1/16W	Metal Oxide	AA
R621	VRD-RA2EE4R7J	V	4.7	1/4W	Carbon	AA
R622	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide	AA
R623	VRD-RA2BE393J	V	39k	1/8W	Carbon	AA
R624	VRD-RA2BE224J	V	220k	1/8W	Carbon	AA
R628	VRS-CY1JF331F	V	330	1/16W	Metal Oxide	AA
R629	VRD-RA2BE331J	V	330	1/8W	Carbon	AA
R651	VRS-CY1JF273J	V	27k	1/16W	Metal Oxide	AA
R652	VRS-CY1JF472J	V	4.7k	1/16W	Metal Oxide	AA
R653	VRS-CY1JF473J	V	47k	1/16W	Metal Oxide	AA
R654	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide	AA
R655	VRS-CY1JF473J	V	47k	1/16W	Metal Oxide	AA
R656	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide	AA
R657	VRS-CY1JF821J	V	820	1/16W	Metal Oxide	AA
R658	VRS-CY1JF682J	V	6.8k	1/16W	Metal Oxide	AA
R661	VRD-RA2BE273J	V	27k	1/8W	Carbon	AA
R662	VRS-CY1JF472J	V	4.7k	1/16W	Metal Oxide	AA
R663	VRD-RA2BE473J	V	47k	1/8W	Carbon	AA
R664	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide	AA
R665	VRD-RA2BE473J	V	47k	1/8W	Carbon	AA
R666	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide	AA
R667	VRS-CY1JF821J	V	820	1/16W	Metal Oxide	AA
R668	VRS-CY1JF682J	V	6.8k	1/16W	Metal Oxide	AA
R671	VRS-CY1JF123J	V	12k	1/16W	Metal Oxide	AA
R672	VRS-CY1JF472J	V	4.7k	1/16W	Metal Oxide	AA
R675	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R703	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R704	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R705	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R706	VRS-CY1JF153J	V	15k	1/16W	Metal Oxide	AA
R707	VRS-CY1JF153J	V	15k	1/16W	Metal Oxide	AA
R708	VRS-CY1JF471J	V	470	1/16W	Metal Oxide	AA
R709	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide	AA
R710	VRS-CY1JF224J	V	220k	1/16W	Metal Oxide	AA
R711	VRS-CY1JF472J	V	4.7k	1/16W	Metal Oxide	AA
R712	VRS-CY1JF473J	V	47k	1/16W	Metal Oxide	AA
R713	VRS-CY1JF564J	V	560k	1/16W	Metal Oxide	AA
R714	VRD-RA2BE332J	V	3.3k	1/8W	Carbon	AA
R715	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R716	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide	AA
R717	VRD-RA2BE681J	V	680	1/8W	Carbon	AA
R718	VRS-CY1JF182J	V	1.8k	1/16W	Metal Oxide	AA
R719	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R720	VRD-RA2BE103J	V	10k	1/8W	Carbon	AA
R722	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R725	VRS-CY1JF104J	V	100k	1/16W	Metal Oxide	AA
R726	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R727	VRD-RA2EE151J	V	150	1/4W	Carbon	AA
R728	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide	AA
R731	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R732	VRS-CY1JF153J	V	15k	1/16W	Metal Oxide	AA
R734	VRS-CY1JF223J	V	22k	1/16W	Metal Oxide	AA
R735	VRS-CY1JF393J	V	39k	1/16W	Metal Oxide	AA
R736	VRS-CY1JF183J	V	18k	1/16W	Metal Oxide	AA
R737	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide	AA
R738	VRD-RA2BE104J	V	100k	1/8W	Carbon	AA
R739	VRD-RA2BE271J	V	270	1/8W	Carbon	AA
R740	VRS-CY1JF104J	V	100k	1/16W	Metal Oxide	AA
R741	VRD-RA2BE271J	V	270	1/8W	Carbon	AA
R742	VRS-CY1JF154J	V	150k	1/16W	Metal Oxide	AA
R743	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R744	VRS-CY1JF154J	V	150k	1/16W	Metal Oxide	AA
R745	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R747	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R748	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R751	VRS-CY1JF123J	V	12k	1/16W	Metal Oxide	AA
R752	VRD-RA2BE123J	V	12k	1/8W	Carbon	AA
R753	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide	AA
R754	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R758	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R760	VRS-CY1JF1R0J	V	1	1/16W	Metal Oxide	AA
R761	VRS-CY1JF1R0J	V	1	1/16W	Metal Oxide	AA
R762	VRS-CY1JF123J	V	12k	1/16W	Metal Oxide	AA
R763	VRS-CY1JF563J	V	56k	1/16W	Metal Oxide	AA
R764	VRS-CY1JF183J	V	18k	1/16W	Metal Oxide	AA
R765	VRS-CY1JF333J	V	33k	1/16W	Metal Oxide	AA
R766	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R770	VRS-CY1JF332F	V	3.3k	1/16W	Metal Oxide	AA
R773	VRS-CY1JF222J	V	2.2k	1/16W	Metal Oxide	AA
R781	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R782	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R783	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R784	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R801	VRS-CY1JF333J	V	33k	1/16W	Metal Oxide	AA
R802	VRS-CY1JF333J	V	33k	1/16W	Metal Oxide	AA
R804	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R810	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R812	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA
R813	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide	AA
R814	VRS-CY1JF272J	V	2.7k	1/16W	Metal Oxide	AA
R817	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R818	VRD-RA2BE103J	V	10k	1/8W	Carbon	AA
R821	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide	AA
R822	VRS-CY1JF272J	V	2.7k	1/16W	Metal Oxide	AA
R823	VRS-CY1JF562J	V	5.6k	1/16W	Metal Oxide	AA
R824	VRS-CY1JF472J	V	4.7k	1/16W	Metal Oxide	AA
R825	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R826	VRS-CY1JF333J	V	33k	1/16W	Metal Oxide	AA
R830	VRD-RM2HD220J	V	22	1/2W	Carbon	AA
R851	VRD-RM2HD100J	V	10	1/2W	Carbon	AA
R852	VRD-RA2BE331J	V	330	1/8W	Carbon	AA
⚠ R902	VRC-UB2HG275K	V	2.7M	1/2	Solid	AF
⚠ R906	VRD-RM2HD681J	V	680	1/2W	Carbon	AA
⚠ R907	VRN-VV3ABR47J	V	0.47	1W	Metal Film	AA
⚠ R908	VRD-RM2HD4R7J	V	4.7	1/2W	Carbon	AA
⚠ R910	VRS-CY1JF2R2J	V	2.2	1/16W	Metal Oxide	AA
⚠ R911	VRS-CY1JF330J	V	33	1/16W	Metal Oxide	AA
⚠ R912	VRS-CY1JF152J	V	1.5k	1/16W	Metal Oxide	AA
⚠ R913	VRS-CY1JF332F	V	3.3k	1/16W	Metal Oxide	AA
⚠ R914	VRD-RM2HD333J	V	33k	1/2W	Carbon	AA
⚠ R919	VRD-RM2HD332J	V	3.3k	1/2W	Carbon	AA
⚠ R920	VRS-CY1JF472J	V	4.7k	1/16W	Metal Oxide	AA
⚠ R921	VRS-CY1JF222J	V	2.2k	1/16W	Metal Oxide	AA
⚠ R922	VRS-CY1JF332J	V	3.3k	1/16W	Metal Oxide	AA
⚠ R923	VRS-CY1JF822J	V	8.2k	1/16W	Metal Oxide	AA
⚠ R924	VRS-CY1JF183J	V	18k	1/16W	Metal Oxide	AA
⚠ R925	VRD-RA2BE152J	V	1.5k	1/8W	Carbon	AA
⚠ R926	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide	AA
⚠ R927	VRS-CY1JF332J	V	3.3k	1/16W	Metal Oxide	AA
⚠ R928	VRD-RA2BE102J	V	1k	1/8W	Carbon	AA

Ref. No.	Part No.	★	Description	Code

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Main Unit (Continued)

⚠	R931	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide		AA
⚠	R933	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide		AA
⚠	R935	VRS-CY1JF101J	V	100	1/16W	Metal Oxide		AA
⚠	R936	VRD-RA2EE331J	V	330	1/4W	Carbon		AA
	R951	VRD-RM2HD152J	V	1.5k	1/2W	Carbon		AA
	R952	VRS-CY1JF223J	V	22k	1/16W	Metal Oxide		AA
	R954	VRS-CY1JF561J	V	560	1/16W	Metal Oxide		AA
	R955	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide		AA
	R957	VRD-RA2BE472J	V	4.7k	1/8W	Carbon		AA
	R958	VRD-RM2HD182J	V	1.8k	1/2W	Carbon		AA
	R959	VRD-RA2BE103J	V	10k	1/8W	Carbon		AA
	R960	VRN-VV3DB3R3J	V	3.3	2W	Metal Film		AB
	R961	VRD-RM2HD182J	V	1.8k	1/2W	Carbon		AA
	R962	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide		AA
	R973	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide		AA
	R974	VRS-CY1JF472J	V	4.7k	1/16W	Metal Oxide		AA
	R990	VRD-RA2BE271J	V	270	1/8W	Carbon		AA
	R991	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide		AA
	R992	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide		AA
	R993	VRS-CY1JF222J	V	2.2k	1/16W	Metal Oxide		AA
	R999	VRD-RA2BE102J	V	1k	1/8W	Carbon		AA

MISCELLANEOUS PARTS

⚠	ACC901	QACCD3045AJZZ	V	AC Cord	AL
	FB201	RBLN-0036CEZZ	V	Ferrite Bead	AB
	FB701	RBLN-0036CEZZ	V	Ferrite Bead	AB
	FB702	RBLN-0036CEZZ	V	Ferrite Bead	AB
⚠	FB902	RBLN-0036CEZZ	V	Ferrite Bead	AB
⚠	FB905	RBLN-0037CEZZ	V	Ferrite Bead	AB
⚠	FH901	QFSHD1014CEZZ	V	Fuse Holder	AC
⚠	FH902	QFSHD1013CEZZ	V	Fuse Holder	AC
⚠	F901	QFS-B1625CEZZ	V	Fuse, 1.6A/125V	AC
	J201	QJAKL0006AJZZ	V	Jack	AL
	P161	QPLGN0362REZZ	V	Plug	AC
	P164	QPLGN0262REZZ	V	Plug	AB
	P168	QPLGN0262REZZ	V	Plug	AB
	P201	QPLGN0447REZZ	V	Plug, 4pin (TP201-4)	AA
	P208	QPLGN0659REZZ	V	Plug, 6pin	AC
	P209	QPLGN0559REZZ	V	Plug, 5pin	AB
	P210	QPLGN0459REZZ	V	Plug, 4pin	AG
	P704	QPLGZ0883GEZZ	V	Plug, 8pin (AC)	AD
	P801	QPLGN0262REZZ	V	Plug, 2pin (CASSETTE)	AB
	P802	QPLGN0262REZZ	V	Plug, 2pin (TEST)	AB
	SC301	QSOCN0911REN1	V	Socket, 9pin (AH)	AD
	SC601	QSOCN0604REN1	V	Socket, 6pin (AA)	AB
	SC602	QSOCZ0293GEZZ	V	Socket, 2pin (AE)	AC
	SC701	QSOCN0704REN1	V	Socket, 7pin (AD)	AB
	SC702	QSOCZ0292GEZZ	V	Socket, 2pin (AL)	AC
	SC703	QSOCZ1425CEZZ	V	Socket, 14pin (AF)	AD
	SC704	QSOCZ0625CEZZ	V	Socket, 6pin (AO)	AC
	SC705	QSOCN0506REN1	V	Socket, 5pin (AJ)	AC
	S101	QSW-S0004AJZZ	V	Switch, RF Conv.	AF
	S701	QSW-F0042AJZZ	V	Rec Tip Switch	AG
	S702	QSW-F0043GEZZ	V	Switch, Cassette Control	AD
	S801	QSW-K0002AJZZ	V	Switch, Set	AD
	S802	QSW-K0002AJZZ	V	Switch, Menu	AD

––– End of Main Unit –––

Ref. No.	Part No.	★	Description	Code

DUNTK5611TEV2
OPERATION Unit

RESISTORS

R882	VRD-RA2BE222J	V	2.2k	1/8W	Carbon		AA
R883	VRD-RA2BE332J	V	3.3k	1/8W	Carbon		AA
R884	VRD-RA2BE472J	V	4.7k	1/8W	Carbon		AA
R885	VRD-RA2BE103J	V	10k	1/8W	Carbon		AA

MISCELLANEOUS PARTS

P881	QPLGZ0626CEZZ	V	Plug, 6pin (OA)	AF
S882	QSW-K0002AJZZ	V	Switch, CH Up	AD
S883	QSW-K0002AJZZ	V	Switch, CH Down	AD
S884	QSW-K0002AJZZ	V	Switch, PAUSE/STILL	AD
S885	QSW-K0002AJZZ	V	Switch, STOP	AD
S887	QSW-K0002AJZZ	V	Switch, REC	AD

––– End of Operation Unit –––

DUNTK5612TEV3
Front AV Unit

DIODES

D891	RH-PX0283GEZZ	V	Photo Diode				AE
D892	RH-PX0281GEZZ	V	Photo Diode				AC
D893	RH-PX0270GEZZ	V	Photo Diode				AC
D894	RH-PX0270GEZZ	V	Photo Diode				AC

CAPACITORS

C793	VCKYD41CY103N	V	0.01	16V	Ceramic		AA
C891	VCEA9M0JW476M	V	47	6.3V	Electrolytic		AB

RESISTORS

R792	VRD-RA2BE102J	V	1k	1/8W	Carbon		AA
R891	VRD-RA2BE122J	V	1.2k	1/8W	Carbon		AA
R892	VRD-RA2BE122J	V	1.2k	1/8W	Carbon		AA
R893	VRD-RA2BE101J	V	100	1/8W	Carbon		AB
R894	VRD-RA2BE472J	V	4.7k	1/8W	Carbon		AA
R895	VRD-RA2BE221J	V	220	1/8W	Carbon		AA
R2202	VRD-RA2BE101J	V	100	1/8W	Carbon		AB

MISCELLANEOUS PARTS

P891	QPLGZ1426CEZZ	V	Plug, 14pin (FA)	AE
RMC891	RRMCU0064GEZZ	V	Remoet Receiver	AG
SC891	QSOCN0604REN1	V	Socket, 6pin (FB)	AB
S891	QSW-K0002AJZZ	V	Switch, DISPLAY	AD
S892	QSW-K0002AJZZ	V	Switch, GAMMA	AD
S893	QSW-K0002AJZZ	V	Switch, POWER	AD
S894	QSW-K0002AJZZ	V	Switch, EJECT	AD

––– End of Front AV Unit –––

DUNTK5613TEV2
GAMMA Unit

Ref. No.	Part No.	★	Description	Code
			INTEGRATED CIRCUITS	
IC291	VHiMM1109XS-1	V	MM1109XS	AK
IC401	VHiNJM2137M-1	V	NJM2137M	AG
IC402	VHiNJM2137M-1	V	NJM2137M	AG
IC403	VHiCXA1211M-1	V	CXA1211M	AH
IC404	VHiBA226F//1E	V	BA226F-E2	AG
IC405	VHiBU4066CF1E	V	BU4066BCF	AE
IC406	VHiNJM2533M-1	V	NJM2533M	AF
			TRANSISTORS	
Q261	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q262	VS2SA1271-Y-1	V	2SA1271-Y	AB
Q263	VSDTC124EKA-1	V	DTC124EKA	AB
Q271	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q272	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q274	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q401	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q402	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q403	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q404	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q405	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q406	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q407	VS2SA1037KQ-1	V	2SA1037KQ	AA
Q408	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q551	VS2SC2412KQ-1	V	2SC2412KQ	AA
Q552	VS2SC2412KQ-1	V	2SC2412KQ	AA
			DIODES	
D404	RH-DX0475CEZZ	V	Diode	AB
			CAPACITORS	
C261	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C262	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C274	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C277	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C278	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C291	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C292	VCKYCY1HB221K	V	220p 50V Ceramic	AA
C293	VCQYWA1HA561J	V	560p 50V Mylar	AA
C294	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C295	VCKYCY1HB472K	V	4700p 50V Ceramic	AA
C296	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C297	VCEA9A1CW106M	V	10 16V Electrolytic	AB
C401	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C402	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C403	VCEA9M1HW105M	V	1 50V Electrolytic	AB
C404	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C405	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C406	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C407	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C408	VCKYCY1HB102K	V	1000p 50V Ceramic	AA
C410	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C411	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C412	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C413	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C414	VCKYCY1HB102K	V	1000p 50V Ceramic	AA
C415	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C416	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C417	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C418	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C419	VCKYCY1HF103Z	V	0.01 50V Ceramic	AA
C420	VCQYWA1HA102J	V	1000p 50V Mylar	AA
C421	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C422	VCQYWA1HA102J	V	1000p 50V Mylar	AA
C423	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA
C424	VCEA9M1CW476M	V	47 16V Electrolytic	AB
C425	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C426	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C432	VCEA9M1CW106M	V	10 16V Electrolytic	AB
C433	VCCCCY1HH330J	V	33p 50V Ceramic	AA
C437	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
C438	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA
C551	VCKYCY1CF104Z	V	0.1 16V Ceramic	AA
C552	VCEA9M0JW476M	V	47 6.3V Electrolytic	AB
			RESISTORS	
R261	VRD-RA2BE102J	V	1k 1/8W Carbon	AA
R262	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R263	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R264	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R265	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA
R266	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R271	VRS-CY1JF221J	V	220 1/16W Metal Oxide	AA
R272	VRS-CY1JF221J	V	220 1/16W Metal Oxide	AA
R273	VRS-CY1JF471J	V	470 1/16W Metal Oxide	AA
R274	VRS-CY1JF561J	V	560 1/16W Metal Oxide	AA
R275	VRS-CY1JF122J	V	1.2k 1/16W Metal Oxide	AA
R276	VRS-CY1JF473J	V	47k 1/16W Metal Oxide	AA
R277	VRS-CY1JF223J	V	22k 1/16W Metal Oxide	AA
R278	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R284	VRD-RA2BE101J	V	100 1/8W Carbon	AB
R291	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R292	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R293	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R294	VRS-CY1JF334J	V	330k 1/16W Metal Oxide	AA
R295	VRS-CY1JF104F	V	100k 1/16W Metal Oxide	AA
R296	VRS-CY1JF823J	V	82k 1/16W Metal Oxide	AA
R297	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R298	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R401	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R402	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R403	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R404	VRS-CY1JF332F	V	3.3k 1/16W Metal Oxide	AA
R405	VRS-CY1JF182F	V	1.8k 1/16W Metal Oxide	AA
R407	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R408	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R409	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R410	VRS-CY1JF332J	V	3.3k 1/16W Metal Oxide	AA
R411	VRS-CY1JF183J	V	18k 1/16W Metal Oxide	AA
R412	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R413	VRS-CY1JF101J	V	100 1/16W Metal Oxide	AA
R414	VRD-RA2BE101J	V	100 1/8W Carbon	AB
R418	VRS-CY1JF331F	V	330 1/16W Metal Oxide	AA
R419	VRS-CY1JF151F	V	150 1/16W Metal Oxide	AA
R420	VRS-CY1JF122J	V	1.2k 1/16W Metal Oxide	AA
R421	VRS-CY1JF821J	V	820 1/16W Metal Oxide	AA
R422	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R423	VRS-CY1JF122J	V	1.2k 1/16W Metal Oxide	AA
R424	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R425	VRS-CY1JF102J	V	1k 1/16W Metal Oxide	AA
R427	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA
R428	VRS-CY1JF103J	V	10k 1/16W Metal Oxide	AA
R429	VRS-CY1JF222J	V	2.2k 1/16W Metal Oxide	AA
R430	VRS-CY1JF682J	V	6.8k 1/16W Metal Oxide	AA
R431	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA
R432	VRS-CY1JF152J	V	1.5k 1/16W Metal Oxide	AA
R433	VRS-CY1JF122J	V	1.2k 1/16W Metal Oxide	AA
R434	VRS-CY1JF473J	V	47k 1/16W Metal Oxide	AA
R435	VRS-CY1JF473J	V	47k 1/16W Metal Oxide	AA
R436	VRS-CY1JF472J	V	4.7k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code

DUNTK5613TEV2
GAMMA Unit (Continued)

R437	VRS-CY1JF472J	V	4.7k	1/16W	Metal Oxide	AA
R438	VRS-CY1JF101J	V	100	1/16W	Metal Oxide	AA
R441	VRS-CY1JF682F	V	6.8k	1/16W	Metal Oxide	AA
R442	VRS-CY1JF682F	V	6.8k	1/16W	Metal Oxide	AA
R443	VRS-CY1JF101J	V	100	1/16W	Metal Oxide	AA
R446	VRS-CY1JF821J	V	820	1/16W	Metal Oxide	AA
R464	VRS-CY1JF822F	V	8.2k	1/16W	Metal Oxide	AA
R468	VRS-CY1JF101J	V	100	1/16W	Metal Oxide	AA
R469	VRS-CY1JF681F	V	680	1/16W	Metal Oxide	AA
R470	VRS-CY1JF681F	V	680	1/16W	Metal Oxide	AA
R471	VRS-CY1JF331F	V	330	1/16W	Metal Oxide	AA
R473	VRS-CY1JF103J	V	10k	1/16W	Metal Oxide	AA
R474	VRS-CY1JF562J	V	5.6k	1/16W	Metal Oxide	AA
R475	VRS-CY1JF123F	V	12k	1/16W	Metal Oxide	AA
R476	VRS-CY1JF473J	V	47k	1/16W	Metal Oxide	AA
R478	VRS-CY1JF822F	V	8.2k	1/16W	Metal Oxide	AA
R551	VRS-CY1JF821J	V	820	1/16W	Metal Oxide	AA
R552	VRS-CY1JF561J	V	560	1/16W	Metal Oxide	AA
R553	VRS-CY1JF182F	V	1.8k	1/16W	Metal Oxide	AA
R554	VRS-CY1JF272J	V	2.7k	1/16W	Metal Oxide	AA
R555	VRS-CY1JF821J	V	820	1/16W	Metal Oxide	AA
R556	VRS-CY1JF102J	V	1k	1/16W	Metal Oxide	AA
R557	VRS-CY1JF122J	V	1.2k	1/16W	Metal Oxide	AA

MISCELLANEOUS PARTS

SC401	QSOCN0509REN1	V	Socket, 5pin	AC
SC402	QSOCN0609REN1	V	Socket, 6pin	AC
SC403	QSOCN0409REN1	V	Socket, 4pin	AC

––– End of GAMMA Unit –––

DUNTK5656TEV2
Front AV Jack Unit

RESISTORS

R2201	VRD-RA2BE750J	V	75	1/8W	Carbon	AA

MISCELLANEOUS PARTS

J202	QJAKE0195GEZZ	V	Jack	AC
J601	QJAKE0158GEZZ	V	Jack	AC
J602	QJAKE0157GEZZ	V	Jack	AC
SC8801	QSOCN0604REN1	V	Socket, 6pin (JA)	AB

––– End of Front AV Jack Unit –––

Ref. No.	Part No.	★	Description	Code

MECHANISM CHASSIS PARTS

1	LBNDK1011AJZZ	V	Tension Band Ass'y	AH
2	LBOSZ1007AJZZ	V	Tension Arm Boss	AD
4	LBOSZ1006AJZZ	V	Cassette Stay L	AD
5	LCHSM0166AJZZ	V	Main Chassis Ass'y	BA
6	LHLDZ2016AJZZ	V	Loading Motor Block	AG
7	LPOLM0063GEZZ	J	Supply Pole Base Ass'y	AM
8	LPOLM0064GEZZ	J	Take-Up Pole Base Ass'y	AM
9	MLEVF0518AJZZ	V	Take-Up Loading Arm Ass'y	AF
10	MLEVF0519AJZZ	V	Supply Loading Arm Ass'y	AF
11	MLEVF0499AJZZ	V	Pinch Drive Lever Ass'y	AG
12	MLEVF0500GEZZ	J	Pinch Roller Lever Ass'y	AW
15	MLEVF0523AJZZ	V	Tension Arm Ass'y	AH
16	LANGF9620AJFW	V	A/C Head Plate	AG
17	MLEVP0271AJZZ	V	Sifter Drive Lever	AE
18	MLEVP0272AJZZ	V	Pinch Double Action Lever	AD
19	MLEVP0301AJZZ	V	Reverse Guide Lever Ass'y	AL
20	MLEVP0275AJZZ	V	Reverse Drive Lever	AD
21	MLEVP0292AJZZ	V	Slow Brake Lever	AE
22	MLEVP0290AJZZ	V	Open Lever	AD
23	MLEVP0293AJZZ	V	Clutch Lever	AE
24	MLEVP0294AJZZ	V	Sup Main Brake Ass'y	AF
25	MLEVP0295AJZZ	V	Take-Up Main Brake Ass'y	AF
26	CLEVP0287AJZZ	V	Auto Head Cleaner Ass'y	AG
27	MSLiP0010AJZZ	V	Shifter	AH
29	MSPRD0175AJFJ	V	Reverse Guide Spring 2	AE
30	MSPRT0402AJFJ	V	Loading Double Action Spring	AE
31	MSPRT0403AJFJ	V	Pinch Double Action Spring	AD
32	MSPRC0213AJFJ	V	Earth Spring	AC
33	MSPRT0416AJFJ	V	Tension Spring	AD
34	NBLTK0067AJ00	V	Drive Belt	AE
35	NDAiV1078AJ00	V	Reel Disk	AE
36	NGERH1293AJZZ	V	Loading Connect Gear	AD
37	NGERH1295AJ00	V	Master Cam	AE
38	NGERH1294AJZZ	V	Casecon Drive Gear	AD
39	NGERH1270AJZZ	V	Take-Up Loading Gear	AF
40	NGERH1271AJZZ	V	Supply Loading Gear	AD
41	NGERH1272AJZZ	V	Pinch Drive Cam	AE
43	NGERH1299AJZZ	V	Reel Relay Gear	AE
44	NGERW1070AJZZ	V	Worm Gear	AD
45	NGERW1066AJZZ	V	Worm Wheel Gear	AD
46	NiDR-0018AJZZ	V	Idler Wheel Ass'y	AK
47	NPLYV0162AJZZ	V	Motor Pulley	AD
48	NPLYV0163AJZZ	V	Limiter Pulley Ass'y	AM
49	NROLP0131GEZZ	J	Guide Roller	AL
50	NSFTP0032AJZZ	V	Tension Pole Adjuster	AB
51	MSPRC0217AJFJ	V	Guide Roller Spring	AC
52	PREFL1011AJZZ	V	Light Guide	AE
53	QCNW-0320AJZZ	V	FFC for Drum Motor	
55	QCNW-0272AJZZ	V	FFC for A/C Head	AF
56	QPWBF5469AJZZ	V	A/C Head PWB	AE
57	QSOCN0605REN1	V	Socket, 6-pin	AB
58	RHEDT0036AJZZ	V	Full Erase Head	AM
59	RHEDU0088GEZZ	J	A/C Head Ass'y	AV
60	RMOTM1078GEZZ	J	Loading Motor	AP
61	RMOTN2055GEZZ	J	Capstan Motor	BA
62	RMOTP1135GEZZ	J	Drum Drive Motor	AX
63	DDRMW0030TEX1	V	Upper and Lower Drum	BU
65	QBRSK0041GEZZ	J	Drum Earth Brush	AD

MECHANISM CHASSIS PARTS (Continued)

Ref. No.	Part No.	★	Description	Code
66	XBPSD26P05J00	V	Drum Drive Motor Mounting Screw (SW2.6P+5S)	AA
67	PGiDC0056GEFW	J	Drum Base	AL
68	QPWBF5468AJZZ	V	PWB (LDG Motor)	AE
69	QPLGZ0292GEZZ	J	Socket (LDG Motor)	AE
70	MSPRC0223AJFJ	V	Azimuth Spring	AC
71	MSPRC0224AJFJ	V	Height Adjusting Spring	AC

––– End of Mechanism Chassis Parts –––

SCREW, NUTS AND WASHERS

Ref. No.	Part No.	★	Description	Code
201	XBPSD26P08000	V	Screw 2.6P+8S A/C Head	AA
202	LX-HZ3082GEZZ	J	A/C Head Screw	AD
203	XHPSD26P06000	V	Screw, C2.6P+6S (For Capstan Motor)	AA
207	XHPSD30P08WS0	V	Screw, C3.0P+6S (For Drum Base)	AA
208	XRESJ30-06000	V	E-Ring, E-3	AA
209	XWHJZ31-05052	V	Washer, W3.1-5.2-0.5	AC
210	XWHJZ31-03052	V	Washer, W3.1-5.2-0.3	AC
211	XWHJZ31-04052	V	Washer, W3.1-5.2-0.4	AC
212	XWHJZ31-06052	V	Washer, W3.1-5.2-0.6	AC
213	XWHJZ31-07052	V	Washer, W3.1-5.2-0.7	AC
214	PSPAP0009AJZZ	V	Reverse Guide Adjusting Nut	AB
216	LX-WZ1041GE00	J	CW 2.6-6-0.5 CAM	AA
218	XBPSD30P08J00	V	Drum Base Mounting screw(SW 3P+8S)	AA
219	LX-WZ1098GE00	J	CW 2.6-4.7-10.5 RED	AB
220	LX-BZ3096GEFD	J	Tilt Adjusting Screw	AA
221	XBPSD26P06000	V	Azimuth Adjusting Screw 2.6+6S	AA
222	LX-BZ3197GEFD	J	Screw (A/C Head)	AD
223	XWHJZ31-08052	V	Washer, W3.1-5.2-0.8	AC

––– End of Screw, Nuts and Washers –––

CASSETTE HOUSING CONTROL PARTS

Ref. No.	Part No.	★	Description	Code
300	CHLDX3081TEV2	V	Cassette Housing Control Ass'y	AX
301	LANGF9592AJFW	V	Upper Plate	AL
302	LHLDX1028AJ00	V	Frame (L)	AH
303	LHLDX1032AJ00	V	Frame (R)	AH
304	LHLDX1030AJZZ	V	Holder (L)	AE
305	LHLDX1031AJZZ	V	Holder (R)	AE
306	MLEVF0469AJFW	V	Proof Lever (R)	AE
307	MLEVP0281AJ00	V	Door Open Lever	AD
308	MSLiF0076AJFW	V	Slider	AK
309	MSPRD0151AJFJ	V	Proof Lever (R) Spring	AB
310	MSPRD0166AJFJ	V	Drive Gear (R) Spring	AE
311	MSPRP0175AJFJ	V	Cassette Spring	AE
312	MSPRT0381AJFJ	V	Double Action Spring	AC
313	NGERH1278AJZZ	V	Drive Gear L	AE
314	NGERH1309AJZZ	V	Drive Gear R	AE
315	NGERR1008AJ00	V	Double Action Rack Gear	AE
316	NGERR3005AJFW	V	Drive Angle Gear	AG
317	NSFTD0041AJFD	V	Main Shaft	AH

––– End of Cassette Housing Control Parts –––

MECHANICAL PARTS

Ref. No.	Part No.	★	Description	Code
600	CCABA3119TEV4	V	Top Cabinet Ass'y	AY
601	GCABB1194AJKZ	V	Main Frame	AT
602	GCOVA2117AJKZ	V	Antenna Terminal Cover	AG
603	LX-HZ3102GEZZ	J	Screw	AB
604	LANGK0183AJFW	V	Top Cabinet Angle (R)	AE
605	LANGK0184AJFW	V	Top Cabinet Angle (L)	AE
606	LHLDZ2044AJZZ	V	F AV PWB Holder (R)	AD
607	LHLDZ2045AJZZ	V	F AV PWB Holder (L)	AD
609	XEBSD30P12000	V	Screw	AA
610	XHPSD30P06WS0	V	Screw	AA
611	XEPSD30P14XS0	V	Screw	AB
612	XJPSD30P10WS0	V	Screw	AA
613	PGUMS0026AJZZ	V	Foot Felt	AB
614	PSLDM4551AJFW	V	H/A Shield	AE
615	LHLDZ2054AJZZ	V	Display Holder (T)	AF
616	LHLDZ2055AJZZ	V	C/B LED Holder	AD
617	LX-HZ3087GEFN	J	Screw	AB
618	LHLDZ1962AJ00	V	Sensor LED Holder	AD
619	LHLDP1089AJ00	V	LED Holder	AC
620	LHLDZ2056AJZZ	V	AV Jack Holder	AE
621	TLABM3913AJZZ	V	Model Lable	AC

––– End of Mechanical Parts –––

FRONT PANEL PARTS

Ref. No.	Part No.	★	Description	Code
501	CPNLC2495TEV1	V	Front Panel Ass'y	BC
501-2	HBDGB3019AJSB	V	SHARP Badge	AL
501-3	HDECQ1939AJSA	V	Cassette Flap	AR
501-4	HDECQ1914AJSA	V	Cassette Flap Dec.	AD
501-5	HDECQ1940AJSA	V	Window Dec.	AP
501-6	JBTN-2920AJSA	V	STOP Button	AG
501-7	JBTN-2898AJSA	V	MENU Button	AE
501-8	JBTN-2899AJSC	V	CH Button	AE
501-9	JBTN-2900AJSC	V	REC Button	AF
501-10	JBTN-2924AJSA	V	GAMMA Button	AK
501-11	JBTN-2902AJSC	V	POWER Button	AE
501-12	HDECQ1908AJSA	V	GAMMA LED Dec.	AE
501-13	HDECQ1909AJSA	V	Display LED Dec.	AE
501-14	MSPRD0103AJFJ	V	Cassette Spring	AB
502	XEBSD26P08000	V	Screw	AA
503	QSW-Z0071GEZZ	J	Jog Switch	AM
504	JBTN-2919AJSA	V	PLAY Button	AH
505	JKNBK1110AJSB	V	Dial	AH
508	TLABZ1565AJZZ	V	Feature Label	AF

––– End of Front Panel Parts –––

SUPPLIED ACCESSORIES

ACCESSORIES

Ref. No.	Part No.	★	Description	Code
QCNW-0298AJZZ		V	75ohm Coaxial Cable	AK
RRMCG0287AJSA		V	Infrared R/C Unit	AY
90A64EC2078A		V	Battery Cover, Infrared R/C	AF
TiNS-3487AJZZ		V	Operation Manual	AP
TCADH0047AJZZ		V	Operation Guide	AC

––– End of Supplied Accessories –––

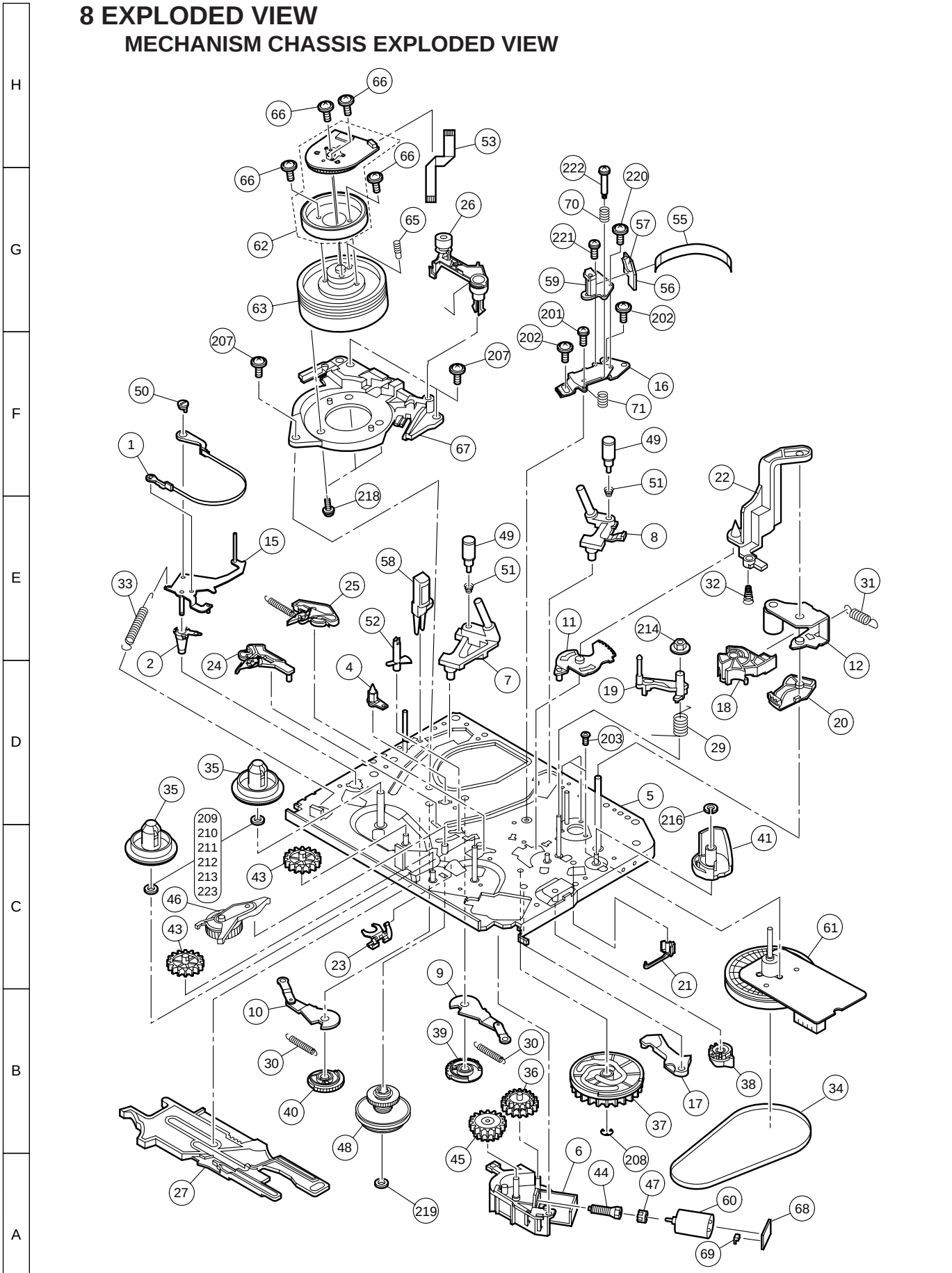
PACKING PARTS
(NOT REPLACEMENT ITEM)

Ref. No.	Part No.	★	Description	Code
SPAKC3931AJZZ		-	Packing Case	—
SPAKX1018AJZZ		-	Packing Foam	—
SSAKA0001AJZZ		-	Polyethylene Sack	—
SSAKP0030AJZZ		-	Polyethylene Bag	—
TLABK0005AJZZ		-	No. Card	—

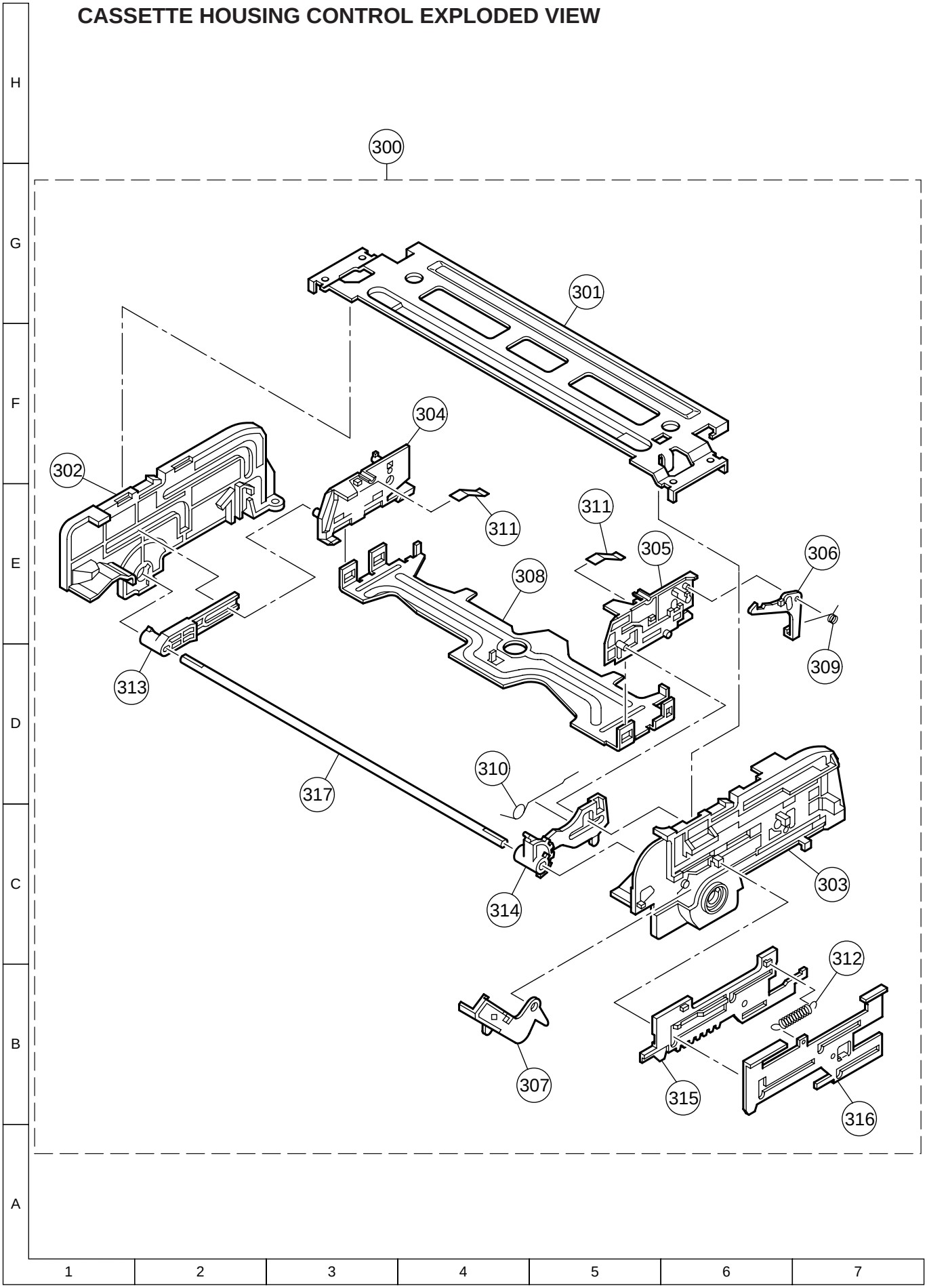
––– End of Packing Parts –––

8 EXPLODED VIEW

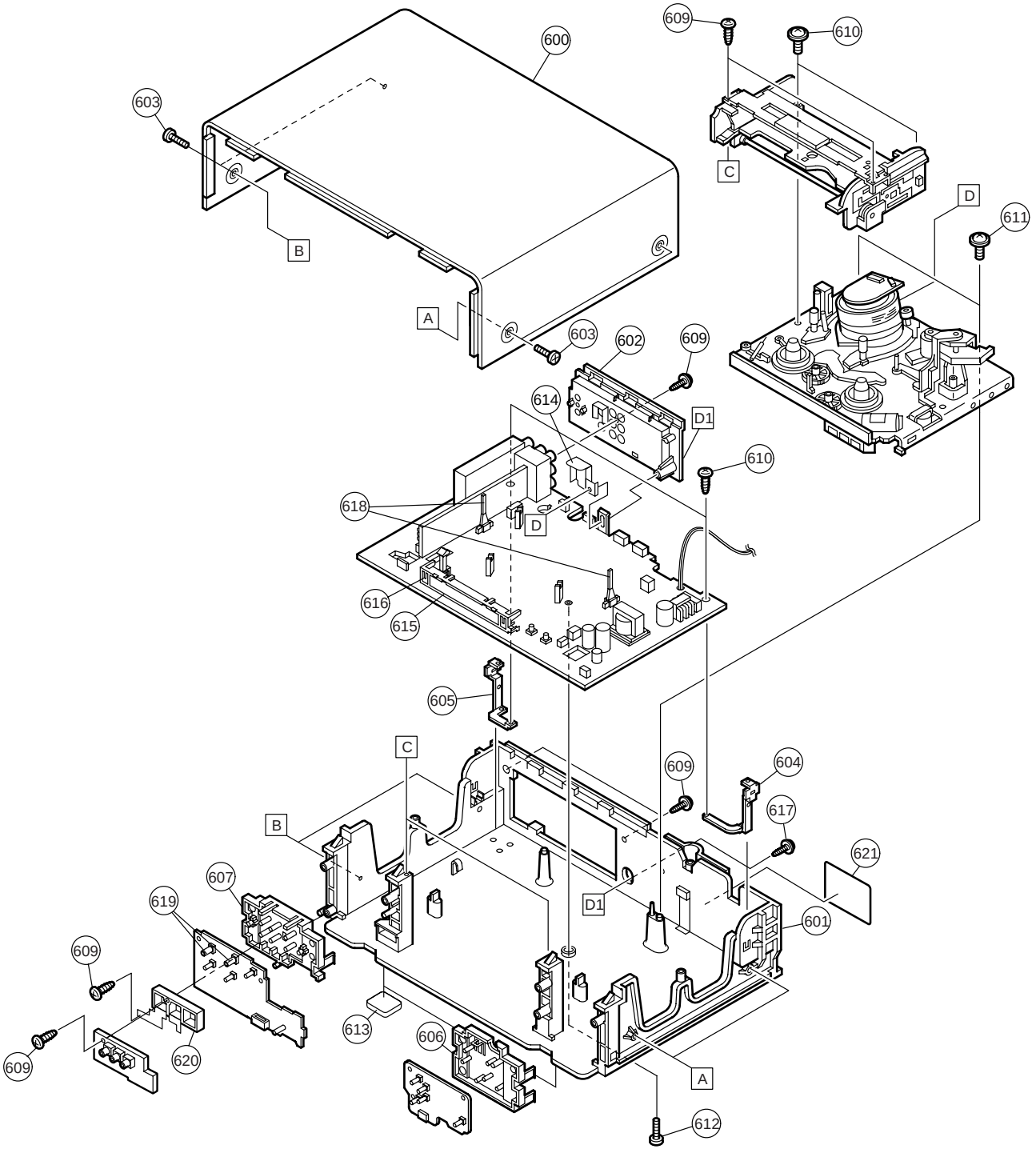
MECHANISM CHASSIS EXPLODED VIEW



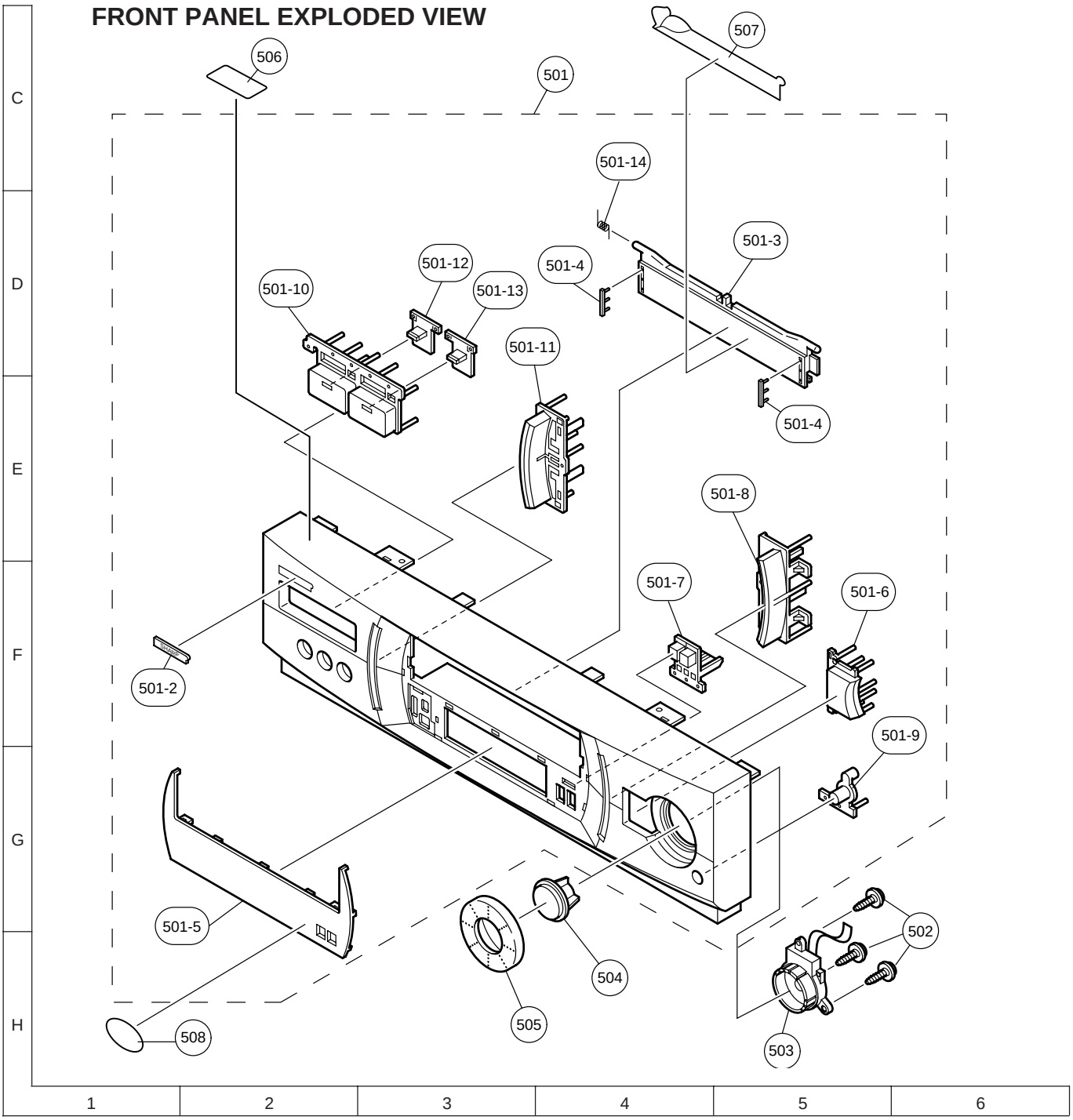
CASSETTE HOUSING CONTROL EXPLODED VIEW



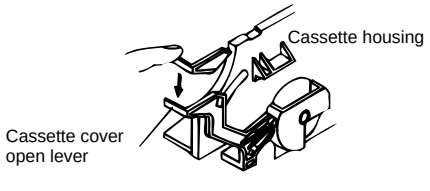
MECHANICAL EXPLODED VIEW



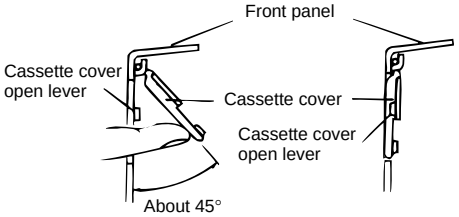
FRONT PANEL EXPLODED VIEW



PRECAUTION ON FRONT PANEL SET-UP

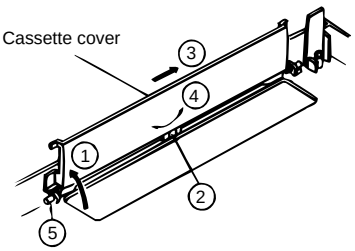


Before attaching the front panel in position, make sure that the cassette cover open lever is in its right place (lower-most). If it is out of position, push it down with a finger.



Keep the cassette over about 45° open and make sure that the cassette cover open lever is between the front panel and the cassette cover. Now fix the front panel in place.

Do not mount the front panel with the cassette cover tilted too open. Otherwise the cassette cover might wrongly run on the cassette housing.



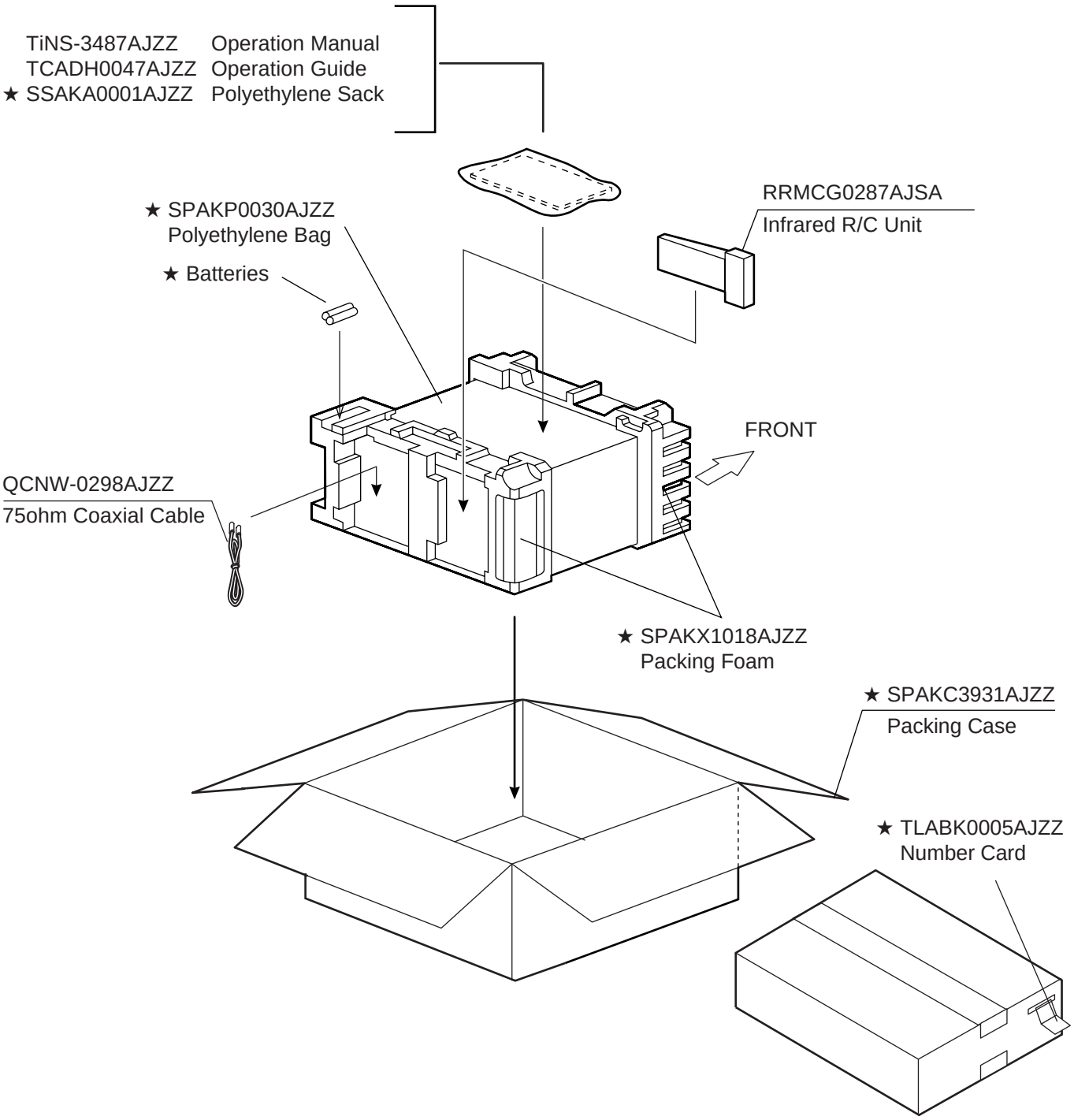
Removing the cassette compartment cover.
1 Open the cassette compartment cover fully.
2 Remove the center positioner.
3 Slide the cover to the right.
4 Slightly bend the cover.
5 Draw out the left-side rod.

8. PACKING OF THE SET

■ Setting of the Knobs

RF conv. CH. preset	at "3" channel

Accessories



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SHARP CORPORATION
AV Systems Group
Quality & Reliability Control Center
Yaita, Tochigi 329-2193, Japan